







# November 2021 Executive Committee Meeting

<b>Schedule</b>	Friday, November 5, 2021 12:00 PM — 1:00 PM CDT
<b>Venue</b>	Maxine A. Smith University Center - Senate Chamber (261)
<b>Organizer</b>	Sparkle Burns

## Agenda

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# 1. Call to Order and Opening Remarks

Presented by Doug Edwards



## 2. Roll Call and Declaration of Quorum

Presented by Melanie Murry



### 3. Presidential Candidate # 1 - Dr. Cammy Abernathy

For Discussion

Presented by Doug Edwards

## **Cammy R. Abernathy**



### ***Education***

1980-1985 Stanford University, Stanford, California  
Ph.D. and Masters Degrees in Materials Science and Engineering

1976-1980 Massachusetts Institute of Technology, Cambridge, Massachusetts  
S.B. Degree in Materials Science and Engineering

### ***Academic Experience***

2009–Present Dean, Herbert Wertheim College of Engineering, University of Florida

2004-2009 Assoc. Dean for Academic Affairs, College of Engineering, Univ. of FL

2001-2004 Alumni Chair, Materials Science and Engineering, University of Florida

12/93-Present Professor of Materials Science and Engineering, University of Florida

1981-1985 Research Assistant, Dept. of Materials Science and Engineering, Stanford Univ.

### ***Industrial Experience***

1985-1993 Member of Technical Staff, AT&T Bell Laboratories, Murray Hill, New Jersey

### ***Awards***

Fellow of MRS, 2015

Fellow of the AAAS, 2015

Electronics & Photonics Division Award of the Electrochemical Society, 2015

Fellow of the APS, 2009

Fellow of the AVS, 2002

AVS Distinguished Lecturer, 2001

Alumni Chair of Materials Science and Engineering, 2001

Fellow of the Electrochemical Society, 2000

University of Florida MSE Faculty Excellence Award, 2003, 1998, 1997

Stanford Engineering Graduate Fellowship, 1980



## *Service to the Profession*

### Advisory, Organizing and Executive Committee Memberships:

Epicenter – National Center for Engineering Pathways to Innovation  
National Advisory Board member, 2014

Massachusetts Institute of Technology Corporation  
Materials Science and Engineering Visiting Committee 2018-2020; 2021- 2023

National Research Council:  
Member of Panel on Materials and Manufacturing Sciences at the Army Research Laboratory, 2020  
Member of NRC evaluation panel for NYS CAT, 1998

National Science Foundation:  
Engineering Research Visioning Alliance, Advisory Board Member 2020 - present  
Review panel member for National Science Foundation, 1995-2009  
Member of NSF evaluation panel for National Nanofabrication Users Network.

Southeastern Consortium of Minorities in Engineering (SECME)  
Board member, 2011- present

Stanford University  
Materials Science and Engineering Visiting Committee 2016

American Association for the Advancement of Science (AAAS):  
Member 2009 – present; Chair-Elect (2011-2012); Chair (2012-2013); Chair (2017)  
Council Delegate Section on Industrial Science and Technology (2017-2019); (2019-2021)

American Society for Engineering Education (ASEE):  
Member 2005 – present  
Engineering Deans Council Executive Board 2017- 2019  
Engineering Deans Council Vice-Chair 2019-2021; Chair, 2021-2023

American Physical Society (APS):  
Member 2005- present

American Vacuum Society (AVS):  
Member Chair of the Electronic Materials and Processing Division of AVS, 1998  
Program Chair of the Electronic Materials and Processing Division of AVS, 1997.  
Board of Directors of AVS, 1999-2001  
Workshop Chair for 17<sup>th</sup> International Union of Vacuum Science and Technology  
Associations (IUVSTA), Oahu, Hawaii, 1997.  
Program chair for the 47<sup>th</sup> International AVS Symposium, Boston 2000.

Materials Research Society:

Member 1993-present

Councilor of Materials Research Society, 1995-1998

Electronic Services Chair, 1996-1998

Member of Materials Research Society Long Range Planning Committee, 1996-1997

Co-organizer of Materials Research Society Symposium titled, "Chemical Perspectives of Microelectronic Materials," Boston, MA, December 1992.

Co-organizer of the 1997 Spring MRS Symposium on GaN and Related Materials, San Francisco, April 1-4, 1997.

Co-organizer of Materials Research Society Symposium E, Boston, MA, December 2003.

Member, Bound Volumes Sub-committee, 2004-2009

2011 MRS Fall Meeting Co-Chair

Electrochemical Society:

Member 1994 – present

Co-organizer of Nitride Symposium for The Electrochemical Society International Meeting (Boston, 1998).

Co-organizer of SOTAPOCS XXX for The Electrochemical Society International Meeting (Seattle, 1999).

Chair of the Norman Hackerman Young Author Award Committee, 1999-2000

Other Conference Organization:

Program Committee for 4<sup>th</sup> Int. Conf. On Chemical Beam Epitaxy and Related Growth Techniques, Nara, Japan, July 1993.

Program Chair for 5<sup>th</sup> Int. Conf. On Chemical Beam Epitaxy and Related Growth Techniques, San Diego, CA, 1995.

Program Committee for the 1998 TMS Electronic Materials Conference.

Program Committee for the 6th Int. Conf. On Chemical Beam Epitaxy (1999).

Program committee for the 10th International Conference on Solid Films and Surfaces, July 2000.

Program committee for the Int. Conf. On Molecular Beam Epitaxy, Edinburgh, 2004.

Chair, Workshop on Room Temperature Spintronic Applications, Gainesville, 2005.

Editorial:

Associate Editor - Journal of Crystal Growth, 1998 - 2003

Associate Editor - Journal of Vacuum Science and Technology, 1996-1998

Co-Editor-In-Chief - MRS Internet Journal of Nitride Semiconductor Research, 1996-1999

***Service to the University***

Constitution Committee, 1997

Physics Faculty Search Committee, 1995 and 1999

Graduate Enrollment Task Force, 1997

Faculty Academic Advisory Committee, 1998-1999

Vice-President for Research Search Committee, 1998, 2011  
 Teacher and Advisor of the Year Selection Committee, 2001  
 Faculty Senate, 1998-2000  
 Presidential Search Committee, 2003, 2012, 2014  
 UF Graduate Curriculum Committee 2004-2009  
 UF Undergraduate Curriculum Committee 2004-2009  
 Assoc. Vice-Pres. for Media Relations Search Committee, 2005  
 Vice-President Development/Alumni Relations Search Committee, 2009  
 Title IX Committee, 2009 - 2016  
 Research Policy Committee, 2009 – present  
 Deans, Directors Development Council, 2009 – 2015, chair 2014  
 UF Research Foundation Board of Directors, 2009 – present  
 CALS Dean Search and Screen Committee, 2010  
 UF Community Campaign Leadership Chair-elect, 2010-2011; Chair 2011-2012  
 IT Security and Compliance Advisory Committee (Chair), 2011 – present  
 IT Policy Council, 2011-present  
 UF Health Diabetes Institute Executive Council, 2014 – present  
 UF Foundation Pre-campaign Steering Council, 2014 – 2017  
 UF Chief Diversity Officer Search Committee (Chair), 2017

### ***Service to the College***

College of Engineering Professorial Excellence Program Selection Committee, 1996  
 College of Engineering Research Foundation Professor Selection Committee, 1997  
 College of Engineering Personnel Board, 1998-2000  
 College of Engineering Curriculum Committee, 2002-2004

### ***Service to the Dept.***

MSE Faculty Search Committee Chair, 1996-1997  
 MSE Computer Committee, 1994-1997 (Chair 1994-1996)  
 Electronic Materials Qualifying Exam Committee, 1996-2004  
 MSE Department Chair Search Committee, 2002  
 Graduate Coordinator, 2002-2004  
 Chair of the MSE Curriculum Committee, 2002-2004

### ***Publications – Google Scholar H index = 70***

Over 500 journal publications, over 430 conference papers, 1 co-authored book, 7 edited books, 8 book chapters, 6 patents and over 35 invited presentations.

### ***Graduate Students***

Ph.D. Committees Chaired: 19

### ***Courses Taught***

Undergraduate: EMA 3010 Introduction to Materials, EMA 4615 Compound Semiconductors

Graduate: EMA 6938 Chemistry of Semiconductor Manufacturing, EMA 6412 Synthesis and Characterization of Electronic Materials

### ***Invited Presentations***

1. "Carbon Doping of III-V Materials," Fifth Int. Conf. on MOVPE and Workshop on MOMBE and Related Techniques, Aachen, Germany, June 1990.
2. "Low Temperature Growth of GaAs and AlGaAs by MOMBE," Mat. Res. Soc. Symp., Boston, MA 1991.
3. "Carbon Doping for High Speed GaAs Electronic Devices," 19<sup>th</sup> Int. Symp. On GaAs and Rel. Compounds, Karuizawa, Japan, September 1992.
4. "Growth of III-V Heterostructures by MOMBE," Nat. Symp of the American Vac. Soc., Chicago, IL, November 1992.
5. "Carbon Doping for Advanced GaAs Devices," Eng. Found. Conf. On Advanced Heterostructure Transistors, Kona, December 1992.
6. "Carbon Doping in GaAs and Related Compounds," Gordon Conference, Oxnard, March 1993.
7. "Growth of Heterojunction Bipolar Transistors," Mat. Res. Soc. Symp., San Francisco, CA, April 1993.
8. "Heterojunction Bipolar Transistors Grown by MOMBE," 4<sup>th</sup> Int. Conf. On Chemical Beam Epitaxy and Rel. Growth Techniques, Nara, Japan, July 1993.
9. "Carbon-Doped HBTs Grown by MOMBE," Japanese Society of Applied Physics, July 1993.
10. "Metalorganic Molecular Beam Epitaxy," Tokyo Institute of Technology, July 1993.
11. "Effect of Base Dopant and Current Density on HBT Reliability," EXMATEC '94, Parma, Italy, April 1994.
12. "Status and Future of Large Area Growth by MOMBE," Spring Meeting of the Electrochemical Society, San Francisco, CA, May 1994.
13. "Growth of III-V Nitrides by Metalorganic Molecular Beam Epitaxy," Fall ECS, Electrochem. Soc., Miami Beach, FL, October 1994.
14. "Growth of Novel Materials by Metalorganic Molecular Beam Epitaxy," 31<sup>st</sup> Annual Symp. of the New Mexico Chapter of the American Vacuum Society, AVS, Albuquerque, NM, April 1995.
15. "Growth of III-V Nitrides by MOMBE," Taipei International Symposium of Surfaces and Thin Films, Taiwan Academica Sinica (Academy of Science), Taipei, Taiwan, March, 1996.
16. "Growth of III-N Materials by MOMBE," Fall Meeting of the Electrochemical Society, Chicago, IL, October 1995.
17. "Synthesis of InTIV Materials," Spring MRS, San Francisco, CA, April 1995.
18. "III-Nitrides," International Materials Research Congress, Cancun, 1996.

19. "Is There a Role for CBE in III-Nitrides?," 6<sup>th</sup> International Conference on Chemical Beam Epitaxy, Montreaux, August 1997.
20. "Doping of III-Nitrides," North American Chemical Congress, Cancun, November 1997.
21. "III-Nitrides for Red and IR Applications," University of Michigan, September 1997.
22. "Er-Doping of III-Nitride Semiconductors," C.R. Abernathy and J.D. MacKenzie, Workshop of New Concepts on 3-D Optical Devices Using Rare Earths and Other Novel Approaches, Asilomar, CA, April 1998.
23. "Growth of III-Nitrides in UHV," International Vacuum Congress, Birmingham, United Kingdom, September 1998.
24. "III-Nitrides for IR Applications," EXMATEC, Cardiff, Wales, 1998.
25. "Status of III-Nitride Growth in UHV," Sandia National Laboratories, Albuquerque, NM, 1998.
26. "Effect of impurity concentration on 1.54 $\mu$ m emission from GaN:Er," Photonics West, San Jose, Jan. 2000.
27. "Deposition of Dielectrics on GaN," American Chemical Society, San Francisco, March 2000.
28. "Rare Earth Doping of GaN," European Materials Research Society, Strausbourg, May 2000.
29. "Growth and Characterization of MgO and Sc<sub>2</sub>O<sub>3</sub> Gate Dielectrics on GaN", 9<sup>th</sup> International Workshop on Oxide Electronics, St. Petersburg, FL, October 2002.
30. "Charge and Spin Functionality in Wide Bandgap Semiconducting Oxides and Nitrides", SPIE – The International Society for Optical Engineering, San Jose, CA, January 2003.
31. "Effects and Composition of Layer Thickness on the Magnetic and Structural Characteristics of GaMnN", 203<sup>rd</sup> Meeting of The Electrochemical Society, Paris, France, May 2003.
32. "Progress in Novel Oxides for Gate Dielectrics and Surface Passivation of GaN/AlGaN HFETs", 203<sup>rd</sup> Meeting of The Electrochemical Society, Paris, France, May 2003.
33. "Ferromagnetism in GaN and SiC Doped with Transition Metals", International Conference on Metallurgical Coatings and Thin Films, San Diego, CA, May 2003.
34. "Materials for Spin Injection into GaN-Based Devices", 50<sup>th</sup> AVS International Symposium, Baltimore, MD, October 2003
35. "Widebandgap Materials for Semiconductor Spintronics," Electrochemical Society Meeting, San Antonio, 2004.
36. "Ferromagnetic Widebandgap Semiconductors," ICMCTF, San Diego, California, 2004.
37. "Prospects for GaN-based Spintronic Devices," American Physical Society, March, 2005.

### *Conference Papers*

1. "Pb<sub>1-x</sub>dxS Films for Solar Cells," J. Mooney, A. Sher, S.B. Radding and C.R. Abernathy, Proc. of the Seventeenth IEEE Photovoltaic Specialists Conference, 1984.
2. "Kinetic Effects in Film Formation of CuInSe<sub>2</sub> Prepared by Chemical Spray Pyrolysis," C.R. Abernathy, C.W. Bates, Jr., A. Anani, B. Haba, Thin Solid Films, 115, L41 (1984).
3. "Pb<sub>1-x</sub>dxS Films for Solar Cells," J. Mooney, A. Sher, S.B. Radding and C.R. Abernathy, Proc. of the Seventeenth IEEE Photovoltaic Specialists Conference, pp. 16-21 (1984).
4. "Novel GaAs/AlGaAs HBT Grown by MOMBE with Carbon Doped Base Layer," F. Ren,

- C.R. Abernathy, S.J. Pearton, T.R. Fullovan, J. Lothian, Y.K. Chen and A.S. Jordan, Proc. of the Symp. of the Electrochem. Soc. 1990.
5. "Ultra-high Doping of GaAs by Carbon During MOMBE," C.R. Abernathy, S.J. Pearton, R. Caruso, F. Ren and J. Kovalchick, Proc. Of the 2<sup>nd</sup> Int. Conf. on Solid State and Integrated Circuit Tech., International Academic Publishing, 1990, p. 743.
6. "The Confinement and Stability of Carbon Doping in GaAs-based HBTs," C.R. Abernathy, Proc. of the 19<sup>th</sup> Int. Symp. on GaAs and Rel. Cmpds, Karuizawa, 1992.
7. "Correlation of Material Parameters with Improved Uniformity of Annealed or In- Alloyed GaAs Substrates," C.R. Abernathy, R. Caruso, K.D. Cummings, P. Dobrilla, M.L. Gray, A.S. Jordan and S.J. Pearton, Electrochemical Society Fall Meeting, Boston, May 1986.
8. "Wafer Mapping of Material and Device Properties in Variously Prepared GaAs Substrates," A.S. Jordan, C.R. Abernathy, R. Caruso, S.J. Pearton and H. Temkin, Intl. Symp. on Defect Recognition and Image Processing in III-V Compounds, Monterey, CA, April 1987, Mat. Sci. Monographs 44, 35 (1987).
9. "Direct Growth of GaAs-on-Si by MOCVD Limitations and Future Directions," W.S. Hobson, S.J. Pearton, C.R. Abernathy, R. Caruso, K.T. Short, M. Stavola and S.M. Vernon, Electrochemical Society Fall Meeting, Hawaii, Oct. 1987, Proc. 10<sup>th</sup> Intl. Conf. on CVD 1987 87-8, 776 (1987).
10. "Effects of Crystalline Disorder in MOCVD GaAs-on-Si," C.R. Abernathy, S.J. Pearton, R. Caruso, K.T. Stavola, J.M. Brown, D.L. Malm, S.M. Vernon and W.S. Hobson, 1987 Electronic Materials Conf., Boulder, CO, June 1987.
11. "Effects of Deposition Thickness on the Properties of GaAs-on-Si," A.S. Jordan, S.J. Pearton, C.R. Abernathy, R. Caruso and S.M. Vernon, 13<sup>th</sup> Intl. Symp. on GaAs and Related Compounds, Capsis, Greece, Sept. 1987, IOP Conf. Ser. 91, 489 (1988).
12. "Growth and Characterization of Low Defect GaAs by Vertical Gradient Freese," C.R. Abernathy, A.P. Kinsella, A.S. Jordan, R. Caruso, S.J. Pearton, H. Temkin and H.H. Wade, 7<sup>th</sup> Intl. Conf. on Crystal Growth, Monterey, CA 1987, J. Cryst. Growth 88, 106 (1987).
13. "High-Quality Films of GaAs on Si on Insulator grown by MOCVD," S.M. Vernon, V. Haven, S. Bunker, C.R. Abernathy, R. Caruso, K.T. Short, S.N.G. Chu, J.H. Brown and S.J. Pearton, 1987 Electronic Matls. Conf., Boulder, CO, June 1987.
14. "Growth and Characterization of GaAs Based Superlattices on Si by MOCVD," W.S. Hobson, S.J. Pearton, C.R. Abernathy, R. Caruso and K.T. Short, 1988 Spring MRS Meeting, Mat. Res. Soc. Symp. Proc., 115, 147 (1988).
15. "RTA of InAs, GaSb and GaP," S.J. Pearton, A.R. Von Neida, J.M. Brown, K.T. Short, C.R. Abernathy, L.J. Oster and U.K. Chakrabarti, Atlanta, GA Meeting of ECS, May 1988.
16. "Characterization of GaAs-AlGaAs Heterostructures Grown on Si by MOCVD," S.J. Pearton, K.S. Jones, C.R. Abernathy, R. Caruso, S.N.G. Chu and S.M. Vernon, 1988 May ECS Meeting, Atlanta, GA.
17. "Annealing of Heteroepitaxial Material," C.R. Abernathy, S.J. Pearton, M.B. Panish and S.N.G. Chu, 1988 May ECS Meeting, Atlanta, GA.
18. "Implant Isolation of InP and InGaAs Grown by MOMBE," C.R. Abernathy, S.J. Pearton, M.B. Panish, R.A. Hamm and L.M. Lunardi, GaAs and Related Compounds, Atlanta,

- GA, Sept. 1988, IOP Conf. Ser., 96, 359 (1989).
19. "Implant Isolation Mechanisms in GaAs, AlGaAs, InP and InGaAs," S.J. Pearton, C.R. Abernathy, W.S. Hobson and A.E. Von Neida, 1988 Fall MRS Meeting and Mat. Res. Soc. Symp. Proc., 144, 433 (1989).
  20. "Formation of Buried Insulation Layers in GaAs-AlGaAs Heterostructures," W.S. Hobson, S.J. Pearton, C.R. Abernathy and A.E. Von Neida, 1989 Spring MRS Meeting and Mat. Res. Soc. Symp. Proc., 148, 397 (1989).
  21. "Ion Implantation Processing of GaAs and Related Compounds," S.J. Pearton, W.S. Hobson and C.R. Abernathy, 1989 Spring MRS Meeting and Mat. Res. Soc. Symp. Proc., 147, 261 (1989).
  22. "Carbon Implantation in GaAs, AlGaAs and InP," S.J. Pearton, C.R. Abernathy, U.K. Chakrabarti. and W.S. Hobson, 1989 Spring MRS Meeting and Mat. Res. Soc. Symp. Proc., 110 (1990).
  23. "Implant Isolation of III-V Semiconductors," C.R. Abernathy, S.J. Pearton and W.S. Hobson, 1989 Spring MRS Meeting and Mat. Res. Soc. Symp. Proc., 35 (1990).
  24. "Acceptor Delta-Doping in GaAs," W.S. Hobson, S.J. Pearton and C.R. Abernathy, 1989 Fall MRS Meeting and Mat. Res. Soc. Symp. Proc., 163, 855 (1990).
  25. "Sn-H Complexes in GaAs," D.M. Kozuch, M. Stavola, S.J. Pearton, C.R. Abernathy and J. Lopata, 1989 Fall MRS Meeting and Mat. Res. Soc. Symp. Proc., 163, 477 (1990).
  26. "Structure and Dynamics of H Acceptor Complexes in Si and GaAs," M. Stavola, S.J. Pearton, C.R. Abernathy and J. Lopata, 1989 APS Meeting, St. Louis; Bull. Am. Phys. Soc., 34, 415 (1989).
  27. "Acceptor Delta-Doping for Schottky Barrier Enhancement on n-Type GaAs," S.J. Pearton, F. Ren, C.R. Abernathy, A. Katz, W.S. Hobson, S.N.G. Chu and J. Kovalchick, 1990 Spring MRS Meeting and Mat. Res. Soc. Symp. Proc., 181, 491 (1990.)
  28. "GaAs-AlGaAs HBTs with C-Doped Base Layer Grown by MOMBE," F. Ren, C.R. Abernathy, S.J. Pearton, T.R. Fullowan, J. Lothian and A.S. Jordan, SOTAPOCS XII, 1990 Spring ECS Meeting, Montreal, May 9, 1990, VR. 90-15, 185 (1990)
  29. "Trimethylamine Alane: A New Robust Precursor for the MOMBE Growth of AlGaAs," C.R. Abernathy, A.S. Jordan, S.J. Pearton, D.A. Bohling and G.T. Muhr., Proc. 17<sup>th</sup> GaAs and Rel. Comp. Symp. IOP Cont. Ser 42, 149 (1990).
  30. "The Feasibility of Using TMAI Alane as an Al Precursor for MOMBE," C.R. Abernathy, A.S. Jordan, S.J. Pearton, F. Ren, F. Baiocchi, D.A. Bohling and G.T. Muhr, Intl. Cryst. Growth Meeting, Denver, July 1990, J. Cryst. Growth, 109, 31 (1991).
  31. "Carbon Doping of III-V Compounds Grown by MOMBE," C.R. Abernathy, S.J. Pearton, F. Ren and W.S. Hobson, Houston, Dec. 1989: J. Cryst. Growth, 105, 375 (1990).
  32. "Novel C-Doped p-Channel GaAs MESFET Grown by MOMBE," F. Ren, C.R. Abernathy and S.J. Pearton, 1991 Spring ECS Meeting, Toronto, Canada, May 1991.
  33. "Incorporation and Behavior of O in AlGaAs Grown by MOMBE Using TMAA1," C.R. Abernathy, J. Song, W.S., Hobson, S.J. Pearton, F. Ren, D.A. Bohling and G.T. Muhr, 1990 Fall MRS Meeting and Mat. Res. Soc. Symp. Proc., 204, 183 (1991).
  34. "AlGaAs Growth by OMVPE using TMAA1," W.S. Hobson, C.R. Abernathy, S.J. Pearton and T.D. Harris, 1990 Fall MRS Meeting and Mat. Res. Soc. Symp. Proc., 204, 189 (1991).
  35. "Passivation of Carbon Acceptors in GaAs by Hydrogen," D.M. Kozuch, M. Stavola, S.J.

- Pearton, C.R. Abernathy, J. Lopata and W.S. Hobson, 1991 APS Meeting; Bull. Am. Phys. Soc., 36, 994 (1991).
36. "The Search for All-Hydride MOMBE: Examination of TMAAl, TMAGa and Arsine," D.A. Bohling, G.J. Muhr, C.R. Abernathy, A.S. Jordan, S.J. Pearton and W.S. Hobson, J. Cryst. Growth, 107, 1068 (1991).
  37. "Passivation of Shallow Acceptors in Si and GaAs by Annealing in H<sub>2</sub>," I. Velloarisoa, D. Kozuch, M. Stavola, R. Peale, G. Watkins, S.J. Pearton, C.R. Abernathy and W.S. Hobson, J. Cryst. Growth, 107, 111 (1991).
  38. "Unintentional Hydrogenation of III-V Semiconductors Device Processing," S.J. Pearton, C.R. Abernathy, W.S. Hobson, J. Lopata, D. Kozuch and M. Stavola, J. Cryst. Growth, 107, 617 (1991).
  39. "Effects of Low Temperature Growth on Impurity and Defect Incorporation in AlGaAs Grown by MOMBE," C.R. Abernathy, S.J. Pearton and D. Bohling, J. Cryst. Growth, 107, 1057 (1991).
  40. "Characterization of GaAs/AlGaAs Heterostructures Grown by OMVPE Using TMAAl as a New Al Source," W.S. Hobson, S. McAfee, K. Jones, N. Paroskevopoulous, C.R. Abernathy, S. Sputz, T. Harris, M. Lamont-Schnoes and S.J. Pearton, J. Cryst. Growth, 107, 1062 (1991).
  41. "Anomalous Damage Depths in Low Energy Ion Beam Processed III-V Semiconductors," S.J. Pearton, F. Ren, T. Fullowan, R. Kopf, W. Hobson, C.R. Abernathy, A. Katz, U. Chakrabarti. and V. Swaminathan, J. Cryst. Growth, 107, 1439 (1991).
  42. "Role of the Diffusivity of Be and C in the Performance of GaAs/AlGaAs HBTs," F. Ren, T. Fullowan, J. Lothian, P. Wisk, C. Abernathy, R. Kopf, A. Amerson, S. Downey and S.J. Pearton, J. Cryst. Growth, 107, 1557 (1991).
  43. "Passivation of C Acceptors in GaAs by Hydrogen," D. Kozuch, M. Stavola, S.J. Pearton, C.R. Abernathy, J. Lopata and W.S. Hobson, APS March Meeting, Detroit, March 1991; Bull. Am. Phys. Soc., 36, 994 (1991).
  44. "Novel C-Doped, p-Channel GaAs MESFET Grown by MOMBE," F. Ren, C.R. Abernathy and S.J. Pearton, 18<sup>th</sup> Intl. Symp. GaAs and Related Comp., Seattle, Sept. 1991; IOP Conf. Ser., 121, 137 (1991).
  45. "Characteristics of Dry Etch GaAs p-n Junctions Grown by MOMBE," C.R. Abernathy, S.J. Pearton, F. Ren, T. Fullowan and J. Lothain, 18th Intl. Symp. GaAs and Related Comp., Seattle, Sept. 1991; IOP Conf. Ser., 121, 191 (1991).
  46. "Incorporation of H into III-V Semiconductors During Growth and Processing," S.J. Pearton, C. Abernathy, W. Hobson, F. Ren, T. Fullowan, J. Lopata. and U. Chakrabarti, 18<sup>th</sup> Intl. Symp. GaAs and Related Comp., Seattle, Sept. 1991; IOP Conf. Ser., 120, 195 (1991).
  47. "UV-Ozone Removal of Interfacial C from GaAs Prior to MOMBE," S.J. Pearton, F. Ren, C. Abernathy, W. Hobson and H. Luftman, Electrochem. Soc., Phoenix, Oct. 1991, Proc. 2<sup>nd</sup>. Intl. Symp. on Cleaning Technology in Semiconductor Device Manufacturing, 92-12, 477 (1992).
  48. "Growth of GaAs/AlGaAs HBTs by MOMBE," C.R. Abernathy, F. Ren, S.J. Pearton, T. Fullowan, K. Montgomery, P. Wisk, J. Lothian, P. Smith and R. Nottenburg, Intl. CBE Conf., Oxford, Sept. 1991; J. Cryst. Growth, 120, 234 (1992).



49. "III-V Semiconductor Dry Etching Using ECR Discharges," S.J. Pearton, F. Ren, T. Fullowan, J. Lothian, C. Abernathy, A. Katz and R. Kopf, SOTAPOCS XV, Electrochemical Society Meeting, Phoenix, Oct. 1991; vol. 92-19, 54 (1992).
50. "Hydrogen Passivation of C-Acceptors in GaAs and Grown from Metalorganic Sources," M. Stavola, D. Kozuch, S.J. Pearton, C. Abernathy and W. Hobson, Workshop on Hydrogen Migration in Semiconductors, Hobsen, Germany, Nov. 1991.
51. "Growth of GaAs and AlGaAs by MOMBE Using Phenylarsine," C. Abernathy, P. Wisk, S.J. Pearton, F. Ren, D. Bohling and G. Muhr, 1991 Fall MRS and Mat. Res. Soc. Symp. Proc., 240, 57 (1992).
52. "Comparison of Disilane and Tetraethyltin as Gaseous Dopants for Growth of n-GaAs and n-AlGaAs by MOMBE," P. Wisk, C.R. Abernathy, S.J. Pearton, F. Ren, T. Fullowan and J. Lothian, 1991 Fall MRS and Mat. Res. Soc. Symp. Proc., 240, 63 (1992).
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September 27, 2021

Trustee Carol Roberts  
Chair, Presidential Search Committee  
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Dear Trustee Roberts,

I am excited to express my interest in becoming a candidate for the position of President of the University of Memphis. UofM is on a tremendous trajectory. It has a compelling vision for the future aimed at enhancing its research impact, while at the same time remaining focused on providing access to a broad spectrum of students, and then supporting those students to success. Because of its urban location in a vibrant city, it is positioned to become an even greater driver for economic development. The momentum and vision are laudable, and the opportunity is exceptional. However, building upon this foundation will require strong leadership to navigate the rapidly changing and challenging world of higher ed.

Who, what and how we teach must evolve or we will lose the tremendous benefit that universities can provide. Higher ed must expand the pool of talent from which we recruit our students and our faculty to include groups which have long been underrepresented in our ranks. Not only are we in need of their talent, we are also in need of their perspective as a multitude of perspectives is essential for the creation of new knowledge and innovation. The future will also require us to expand education for working professionals, as the pace of change accelerates and upskilling becomes an essential component of continued employment. What we teach must evolve to ensure that students have the skills to thrive in a world which is increasingly global, interdisciplinary and underpinned by technology. Society needs creative thinkers and problem solvers who can communicate and lead with integrity. How we teach is being disrupted by the widespread availability of information. Universities must offer more than just content, as it is the experience with content that matters in the 21<sup>st</sup> century. That experience typically revolves around the engagement of the student with a faculty member, but increasingly not in the standard large lecture format. Team and problem based learning, and learning by doing are becoming the preferred standards, requiring new teaching methods and new infrastructure.

In research, the rise of team based science is driving faculty to become more collaborative than ever and encouraging organizations to find new ways to lower barriers between departments and colleges as well as between the public and private sectors. Young faculty wish to feel part of a scientific community, and the most talented are increasingly seeking out those organizations that have strong cultures of mentoring. Cluster hires to enhance the creation of teams and quickly build expertise in critical areas are becoming more common. Sharing of lab space, student space and equipment are now often used as ways to build a sense of community and, particularly for graduate students, to help them fight against feelings of isolation. This again requires new types of infrastructure and new approaches to supporting faculty and students. Faculty are increasingly interested in transitioning their ideas to the marketplace, benefitting both their programs and the community via the creation of new companies and jobs. Success in tech transfer requires education and training along with programs and incentives to support and encourage such activities.



Funding of higher ed is also evolving. Nationally, student debt has climbed to a level that is not sustainable and not supported by the public. Public institutions struggle to keep tuition affordable, while at the same time generating the resources necessary to provide the personnel and infrastructure needed to maintain quality in education and research. Philanthropy is an essential element for the financial health of public institutions. It is unlikely that we will see the levels of state support once enjoyed by state universities, thus public-private partnerships are needed as a way to leverage and extend state resources.

This vision of the evolving world of higher ed has guided me during my tenure as an academic administrator. I have spent the past 12 years as dean of the Herbert Wertheim College of Engineering (HWCOE) at the University of Florida. The 289 tenured/tenure track and 65 instructional faculty of the HWCOE educate over 10,000 students each year. The annual budget of the college exceeds \$115M and is generated from a variety of sources, including tuition, state appropriation, overhead from research grants and philanthropy.

During my tenure as dean, the college has made great strides. Over the past decade, we have increased the number of tenured/tenure track faculty by over 15%, increased research awards by over 80%, from \$64M to \$117M, and secured over \$350M in gifts and donations. The college's endowment has more than doubled to a current value of \$168M. We have also made progress in student success and recruiting. We have improved our undergraduate 4-year graduation rate from 33% to 44%, with a 6-year rate of over 84%. Graduate student recruiting has also been a particular point of emphasis. Our doctoral recruiting program has increased enrollment by women, domestic students and students of color to record levels for our college. At the Masters level, we provide programs both online for working professionals and face to face for residential students.

More important than the increases in productivity and resources, are the advances we have made in quality: quality of our culture, our people, our infrastructure and our programs. Culture ultimately determines the trajectory of an organization. We have focused on five elements: safety, diversity and inclusion, compliance, innovation and leadership, and excellence. A number of programs and practices have been implemented to reinforce these values. Every meeting with our department chairs, every meeting with our college faculty, begins with a review of issues and progress in the areas of safety and diversity and inclusion. These values are fundamental to providing a safe and supporting workplace in which everyone is best positioned for success. Compliance is critical to operation of a successful research enterprise. We have doubled the number of research administrators working directly with faculty in order to reduce, as much as possible, the burden of managing research compliance.

Innovation and leadership are critical to society's future. We created two institutes aimed at fostering these elements in our college. Our Engineering Innovation Institute has done an outstanding job of nurturing entrepreneurship in our college. We are one of the most successful colleges in the country at securing licenses and options for our faculty IP. Roughly 6-12 student startups launch from our college each year. This institute, along with our engineering extension network are working with the state government and local communities to bring more tech industry to Florida. Our goal is to make Florida as competitive for tech industry as Texas, North Carolina etc.

We also formed an Engineering Leadership Institute in response to calls from our alumni and employers to advance skills in areas such as leading diverse teams, integrity, communications, and project management. Leadership has become one of the hallmarks of our college. Over 1000 students take one or more courses from this institute each year. It is not surprising that our graduates are known for quickly moving up the

ranks of responsibility. Our doctoral graduates are increasingly being hired as faculty at other institutions. Our faculty and staff who hold leadership positions in the college are sought out by other units or institutions for promotion. Colleagues from the college leadership team have recently held or are currently holding the following positions: 4 deans of engineering, 1 associate provost, 1 provost, 1 vice president of research, and 2 assistant vice presidents of advancement. I am so very proud of the incredible leadership talent coming from our college.

The quality of our people is reflected in their performance. Our teaching excellence has been greatly enhanced by the hiring of over 40 full time, permanent instructional faculty, whose expertise is student learning and knowledge of the discipline. In the tenured/tenure track ranks, we have recruited a large cadre of collaborative, entrepreneurial and diverse. During my tenure as dean, we have doubled the number of female faculty, doubled the number of black faculty and almost doubled the number of Hispanic faculty. Today, our college has the most diverse faculty of any of the top 25 public colleges of engineering. We have expanded our mentoring activities, particularly in the training of mentors. As a result of our faculty recruiting and development efforts, our research enterprise is growing in funding and impact. In recognition of this, our faculty are receiving more honors than ever before.

Outstanding faculty and students need state of the art facilities. We have completed one new building focused on experiential learning, housing a freshman design lab, a prototyping facility and 2 flipped classrooms. This facility also includes a biotech laboratory and a shared graduate student village housing 60 doctoral students. A second building is under construction which will house 90 faculty and 350 doctoral students from the Computer Science and Electrical and Computer Engineering Departments. These projects were funded in part from philanthropy and in part from the state.

Finally, we have developed programs that support student and faculty success. Student mental health is a significant barrier to academic success. Our college has developed a Health and Wellness Initiative providing students with relevant information and opportunities to join fitness or support groups. Graduate students are particularly susceptible to stress, and are highly sensitive to the mentoring skills of their thesis advisors. To help improve their experience, we have created an Engineering Graduate Student Council to foster communication and have developed a series of programs, including new mentoring training for faculty, to improve doctoral student advising. Our faculty onboarding program has also been expanded, giving new faculty the training necessary for a fast start.

In summary, I have been very fortunate to work with an incredible group of students, faculty and staff in the HWCOE. This experience has provided me with the skills necessary for leadership of a strong comprehensive academic institution. I would be very proud to lead the University of Memphis during the next stage of its development as an R1, student focused, economic engine. Thank you for your consideration.

Sincerely,



Cammy R. Abernathy  
Dean, Herbert Wertheim College of Engineering

## 4. Presidential Candidate # 2 - Dr. Bill Hardgrave

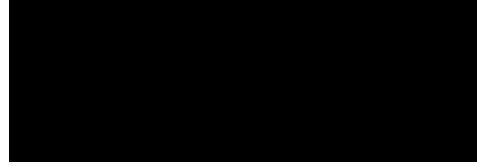
For Discussion

Presented by Doug Edwards

## BILL C. HARDGRAVE

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Auburn, AL 36849  
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hardgrave@auburn.edu



### EDUCATION

- Ph.D.** Oklahoma State University, 1993  
Major Field: Management Information Systems
- MBA** Missouri State University, 1990  
Emphasis: Computer Information Systems
- B.S.** Arkansas Tech University, 1987  
Major Field: Computer Science

### WORK HISTORY

Auburn University (2010 – present)  
Auburn, AL  
*Provost and Senior Vice President for Academic Affairs* (2018 – present)  
*President, Auburn Research and Technology Foundation* (2018 – 2020)  
*Dean and Wells Fargo Professor* (2010 – 2017)  
Raymond J. Harbert College of Business  
Rank: *Professor*

Information Systems Department (1993 – 2010)  
Sam M. Walton College of Business  
University of Arkansas  
Fayetteville, AR  
*Edwin & Karlee Bradberry Chair in Information Systems* (2001 – 2010)  
*Ph.D. Coordinator* (1998 – 2004)  
*Executive Director (and founder)* (1999 – 2010)  
Information Technology Research Institute  
*Director (and founder)* (2005 – 2010)  
RFID Research Center  
Ranks: *Professor, Associate Professor, Assistant Professor*

Department of Management (1990 – 1993)  
Spears School of Business  
Oklahoma State University  
Stillwater, OK  
*Graduate Teaching Associate*

Department of Computer Information Systems (1989 – 1990)

College of Business

Missouri State University

Springfield, MO

*Graduate Assistant* (1989 – 1990)

*Lecturer* (1989)

Ellis Software, Inc.

Springfield, MO (1986 – 1989)

*General Manager*

Computeec, Inc.

Russellville, AR (1985 – 1986)

*General Manager* (1986)

*Programmer/Analyst* (1985)

### ADMINISTRATION

#### *Provost and Senior Vice President for Academic Affairs*

Auburn University

Auburn, AL

(January 2018 – present)

The Provost and Senior Vice President of Academic Affairs serves as the Chief Academic Officer. Auburn University is an R1/D-I university with 30,737 students and a budget of \$1.2 billion.

#### Example activities and outcomes:

- Oversee 12 colleges and schools, including a College of Veterinary Medicine and a School of Pharmacy.
- The Office of the VP for Research, the VP for Outreach, and the VP for Inclusion and Diversity report directly to the Provost.
- Facilitated the development of the new AU strategic plan (2019-2024).
- Key leadership hires:
  - Dean of the Harbert College of Business
  - Dean of the College of Human Sciences
  - Dean of Education
  - Dean of AU Libraries
  - Vice President for Research
- Developed the ‘Faculty 4Rs’ initiative (recruit, retain, reward, recognize). As a result:
  - Created a market adjustment program for faculty: 89 faculty received market adjustments in 2018 and 92 received adjustments in 2019.
  - Revamped the faculty awards program to recognize outstanding teaching, research, service and outreach.
- Restructured the University College by merging it with the College of Liberal Arts.
- Helped develop a responsibility-based budget (also referred to as RCM); almost \$850 million of the \$1.2 billion budget flows through the Provost’s Office.
- Served on task force with state legislators to address higher education accountability in the state of Alabama.
- Worked closely with the AU Faculty Senate on several key initiatives, including a Scholarship Incentive Plan, new faculty titles (e.g., Professor of Practice), developing a policy for dual career hires, among others. The Provost serves on the AU Senate executive committee.
- Serve as chair of the University’s Promotion and Tenure committee.
- Initiated ‘Auburn First’ consisting of a dual enrollment program for high school students and ‘Pathway to the Plains’ a pathways program for students in the Alabama 2-year school system.
- Launched SCORE and First Destination programs which evaluate AU key learning outcomes for graduating students (undergraduate) and collects first destination data for all students (undergraduate and graduate).
- Moved the Office of the Vice President for Research and the Office of Inclusion and Diversity from the President’s Office to the Provost’s Office.
- Liaise with Board of Trustees on strategic planning and academic affairs.

*President (2018 – 2020)*

*Board of Directors (2011 – 2020)*

Auburn Research and Technology Foundation (ARTF)

The ARTF is a 501(c)(3) which oversees the Auburn Research Park. As President of ARTF, I had financial oversight and work closely with the Board of Directors in setting the overall strategy and direction of the research park. During my term as President, we hired a new leadership team, developed a new strategic plan, and added three new buildings to the park.

*Dean and Wells Fargo Professor*

Raymond J. Harbert College of Business

Auburn University

(August 2010 – December 2017)

In 2011, the college developed a new strategic plan. This new plan called for the college to be bold and aggressive, to do things differently, and to generate unprecedented resources. The vision of the college is *to be among the elite public business schools in the U.S.* The strategic plan guides actions and directs resources.

Example activities and outcomes:

- New requirements added to better prepare students, such as internships and study abroad. For example, the Supply Chain Management major is only the second supply chain program in the U.S. to require an internship as a condition of graduation.
- Several new programs added: (1) Business Analytics undergraduate major (one of the first of its kind in the U.S.); (2) PhD in Finance; (3) online undergraduate completer program in Accounting; (4) online MS in Finance; (5) Masters of Real Estate Development (in conjunction with Architecture); and (6) an online undergraduate completer program in Business Administration.
- Student growth:

	Undergraduate	Graduate	Total
2010	3087	574	3661
2017	4625	769	5394
Change	+1538 (50%)	+195 (34%)	+1733 (47%)

- Freshman retention increased from 87.8% to 90.5%.
- 6-year graduation rate improved from 75.1% to 79.8%; 4-year graduation rate improved from 50.6% to 60.3%.
- Shifted focus from quantity of research to quality of research. To support this shift, faculty-developed P&T guidelines adopted in 2011 focused on quality journal publications as a condition of tenure and/or promotion. Furthermore, reward structures were adapted to encourage high quality research.
- Internal summer research grants added to stimulate research, including competitive summer grants and guaranteed summers for untenured faculty.
- Faculty journal publication productivity increased 64%; funded research grew by more than 78%.
- Annual citations grew from 10,189 to 14,122 (with constant number of faculty).

- New research centers established: (1) the Geospatial Research and Applications Center; (2) the Center for Supply Chain Innovation; and (3) the RFID Lab (jointly with Engineering and Human Sciences).
- In 2010, 16 faculty held a professorship, fellowship, or endowed chair. By 2018, 50 endowed positions had been established.
- The COACHE survey found Harbert College faculty to be the most satisfied at Auburn University – in most cases, much higher than other AU colleges/schools.
- The college's first diversity officer was appointed in 2011; as a result, diversity improved. For example, in 2017, 69% of faculty hires were female and 30% were racial minority.
- Launched a bi-annual magazine (the *Harbert Magazine*) and an annual report. We also created a social media platform utilizing Twitter, Instagram, and Facebook, among others.
- Established young alumni chapters (for business) in Atlanta, Birmingham, Nashville, Charlotte, and New York.
- Created opportunities for alumni and industry to participate via a variety of programs such as our mentoring program (~100 mentors), guest speakers (> 400 guest speakers annually), and Entrepreneurial Summit (including the Top Tigers recognition and Entrepreneur Hall of Fame).
- Actively visit alumni and companies. For example, in 2017, we held 56 events (receptions, dinners, etc.) with approximately 3,500 attendees.
- Increased alumni engagement more than 50% (from 8,000 actively engaged alumni to more than 12,000).
- In 2011, the college established a campaign goal of \$100 million. The college raised ~\$135 million by December 2017. For comparison, the college's goal in the prior campaign (ending in 2008) was \$19 million (and raised \$23 million). From 1967 (the college's inception) through 2008, the college raised about \$60 million.
- In June 2013, Raymond and Kathryn Harbert donated \$40 million to the college. At the time, it was the largest gift in Auburn's history. The college was subsequently renamed the Raymond J. Harbert College of Business.
- In 2010, the college's endowment was \$27 million. As of December 2017, the endowment topped \$100 million, representing a 270% increase.
- Rankings often provide external validation of our efforts. Example rankings:
  - #1 in Big Data Analytics research by *EmeraldInsights*
  - #2 Online MBA by *Poets & Quants*
  - #3 Undergraduate supply chain management program by Gartner Group
  - #4 in Supply Chain research by *Transportation Journal*
  - #5 Online Accounting Masters Degree program by *Accounting Degree Review*
  - #6 Online Non-MBA Programs by *US News and World Report*
  - #10 Online MBA Program by *US News and World Report*



*Founder and Executive Director*  
Information Technology Research Institute  
Sam M. Walton College of Business  
University of Arkansas  
Fayetteville, AR  
(1999 – 2010)

The Information Technology Research Center (ITRC) was founded in 1999 with a \$4 million gift from the Walton Family Foundation. In 2004, the ITRC was renamed the Information Technology Research Institute (ITRI) to reflect its broader scope and status on campus. The mission of the ITRI was to advance the state of research and practice in the development and use of information technology for enhancing the performance of individuals and organizations; provide a forum for multi-disciplinary work on issues related to information technology; to promote student interest in the study of information technology; and facilitate the exchange of information between the academic and business communities.

As the first research center in the Walton College, it became the model for additional centers. By 2010, nine additional centers had been formed in the Walton College. The ITRI has always been 100% financially self-sufficient.

Example activities and outcomes:

- Engaged the business community by developing an advisory board. Advisory board companies paid an annual membership fee, comprising about 1/3 of the ITRI's annual budget. At peak, 30 companies were represented, including Walmart, Conoco-Phillips, E.J. Gallo, Microsoft, Oracle, Tyson, and Dillard's, among many others.
- Created the Technology Awareness Program. This program, focused on exposing under-represented groups (females and racial minorities) to the field of Information Technology, brought high school juniors and seniors to campus for one week during the summer. As a result of this program, enrollment from under-represented groups increased significantly.
- Established the Women in IT conference. This annual conference, focusing on women's issues in the IT workforce, regularly drew more than 300 attendees.
- Launched a dedicated IT Career Fair in which more than 50 companies came to campus to recruit IT students.
- Hosted the IT Executives in the Classroom program. More than 50 guest speakers annually visited the IT department's classes.
- Developed a forum for interaction between faculty and industry. This interaction led to multiple research projects.
- Created the IT Working Paper series. As of 2010, more than 150 papers from IT faculty were included. In 2010, approximately 2400 requests for working papers from 134 universities and 207 companies were received.
- Worked with Springdale High School (the largest high school in Arkansas and the largest Hispanic population in the state) to create an IT concentration in high school. This pre-preparation in IT and the coordination with our programs created a pipeline of Hispanic students to the University of Arkansas to study IT.

*Founder and Director*

RFID Research Center  
Sam M. Walton College of Business  
University of Arkansas  
(2005 – 2010)

In 2005, the RFID Research Center was created with an initial research grant from Walmart Stores, Inc. From this grant, the RFID Research Center grew at the University of Arkansas to eventually include more than 50 industry sponsors, and a physical lab space of approximately 10,000 s.f. At peak, about 30 students and five full-time employees worked in the lab. The mission of the RFID Research Center was to create and extend knowledge in RFID utilization and its impacts on business and society. Since its inception, the RFID Research Center has been 100% financially self-sufficient.

In 2014, the RFID Research Center moved from the University of Arkansas to Auburn University where it was renamed the RFID Lab. The center's lab director, technical director, and more than \$2 million in equipment moved to Auburn, along with about \$1 million annual sponsorship and projects. The center's new home is a 13,000 s.f. lab located a few miles off-campus in a former Bruno's Supermarket. More information about the RFID Lab at Auburn University can be found at <http://rfid.auburn.edu>

Example activities and outcomes (2005 – 2010):

- Named one of the “Top 10 Coolest University Labs” in the U.S (by *Network World*).
- Generated or facilitated more than \$30 million in research grants and gifts.
- The center became the first academic lab accredited by EPC Global (one of only nine accredited labs in the world).
- More than 1000 visitors passed through the RFID lab annually. At one point, the lab was such a popular attraction it was put on the official tourist route through the state of Arkansas.
- Center personnel (director, etc.) have been invited to present research and lab activities throughout the world – regularly, more than 15 presentations per year, reaching audiences of more than 10,000.
- Featured in many popular media outlets, such as the *Wall Street Journal*, *PBS* and *The NewsHour*.
- Founding member of the Global RF Lab Alliance – a consortium of six labs from the U.S., Italy, Germany, South Korea, and Hong Kong.
- Developed a methodology to grade and certify RFID tags. The methodology was eventually adopted by GS1 (Global Standards 1) and made a global standard.
- The lab has worked with hundreds of companies on a variety of projects, including Walmart, Boeing, Macy's, Motorola, and Intel, among others. Millions in research grants have been generated to fund these projects.
- The RFID White Paper series (original research conducted by or through the RFID Lab) has had more than 50,000 downloads of its 25+ papers.
- The lab is recognized nationally and internationally as the leading center for RFID research.

**RESEARCH****Journal Articles and Book Chapters** (in reverse chronological order)

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Bottani, E., Hardgrave, B.C., and Volpi, A., “A Methodological Approach to the Development of RFID Supply Chain Projects,” International Journal of RF Technologies: Research and Applications, 1 (2), June 2009, 131-150.

McKnight, D.H., Phillips, B., and Hardgrave, B.C., “Which Reduces IT Turnover Intention the Most: Workplace Characteristics or Job Characteristics?” Information and Management, 46 (3), April 2009, 167-174.

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- Walstrom, K.A., Hardgrave, B.C., and Wilson, R.L., "Forums for Management Information Systems Scholars," Communications of the ACM, 38 (3), March 1995, 93-107.
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- Hardgrave, B.C., and Wilson, R.L., "An Investigation of Guidelines for Selecting a Prototyping Strategy," Journal of Systems Management, 45 (4), April 1994, 28-35.
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## **Books**

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- Chiang, R., Siau, K., and Hardgrave, B.C., Systems Analysis and Design: Techniques, Methodologies, Approaches, and Architectures, edited volume for Advances in Management Information Systems Series, Armonk, NY: ME Sharpe, 2009.
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**Research Grants: Externally Funded**

“The Business Case for RFID,” Walmart Stores, Inc., \$150,024, status: funded for August 15, 2009 through May 15, 2010.

“Tyson Cold Chain Load Temperature Profile Measurement Testing Proposal – Phase III,” Tyson Foods, Inc., \$18,878, status: funded for August 14, 2009 through December 14, 2009.

“UPM Raflatac Corn Tagging Feasibility Study,” UPM Raflatac, \$23,838, status: funded for August 14, 2009 through December 14, 2009.

“Apparel / Footwear RFID Item-Level Tagging,” ADT, Inc., \$64,953, status: funded for March 15, 2009 through October 15, 2009.

“Costco Item-Level Tagging Project,” Costco, Inc., \$69,336; status: funded for January 14, 2009 through May 15, 2009.

“The Business Case for RFID,” Walmart Stores, Inc., \$150,054, status: funded for August 15, 2008 through May 15, 2009.

“Apparel / Footwear Item-Level Tagging: The ROI for RFID (continued),” Voluntary Interindustry Commerce Solutions Association, \$41,255, status: funded for August 15, 2008 through January 31, 2009.

“Tyson Cold Chain Load Temperature Profile Measurement Testing Proposal – Phase II,” Tyson Foods, Inc., \$27,577, status: funded for August 4, 2008 through November 7, 2008.

“Apparel / Footwear Item-Level Tagging: The ROI for RFID,” Voluntary Interindustry Commerce Solutions Association, \$84,633, status: funded for January 1, 2008 through May 12, 2008.

“Tyson Cold Chain Load Temperature Profile Measurement Testing,” Tyson Foods, Inc., \$39,949, status: funded for November 8, 2007 through January 15, 2008.

“Apparel / Footwear Item-Level Tagging: Feasibility and Field Trials” (with D. Armstrong), Voluntary Interindustry Commerce Solutions Association, \$109,949, status: funded for March 15, 2007 through December 31, 2007.

“Examining Supply Chain Efficiency Gains from RFID,” (with M. Waller and J. Aloysius), Walmart Stores, Inc., \$224,806, status: funded for August 15, 2006 through December 31, 2007.

“Does RFID Reduce Out of Stocks?” (with M. Waller), Walmart Stores, Inc., \$185,224, status: funded for August 22, 2005 through May 14, 2006.



“RFID: Dispelling Myths, Ready for the Future, and Exploring Its Benefits,” (with M. Waller), Walmart Stores, Inc., \$85,126, status: funded for January 15, 2005 through May 31, 2005.

“Planning, Designing, and Implementing Change: A Case Study of Two Major Organization Changes - RFID and Software Development Practices,” Walmart Stores, Inc., \$58,893, status: funded for August 15, 2004 through December 15, 2004.

“The Influence of Professional Identification on the Retention of Women and Racial Minorities in the IT Workforce,” (with A. O’Leary-Kelly, V. McKinney, D. Wilson), National Science Foundation, \$603,942; status: funded for June 2003 through May 2006.

“Research and Development of Website Content for Human Resources,” (with D.E. Douglas), Texaco/Star Enterprise, \$13,500, status: funded Spring and Summer 1996.

“A Performance Comparison of Eight Inductive Decision Models for Predicting Commercial Loan Creditworthiness,” (with L. Glorfeld), Worthen Banking Corporation, \$5000, status: funded: Summer 1994.

### **Refereed Proceedings** (in reverse chronological order)

Mooney, J., Salisbury, D., Schwarz, A., Fuller, M., Hardgrave, B., Jessup, L., and Todd, P., “Reflect and Redefine: Deans’ Perspectives on the Positioning of IS within the Business School,” AMCIS 2012 Proceedings, paper 10, July 2012.

Miller, R.E., Hardgrave, B.C., and Jones, T.W., “A Conceptual Model of Service Quality for the Information Systems Function,” Midwest Association for Information Systems 2010 Proceedings, paper 2, 2010.

Nesterkin, D., Jones, T.W., and Hardgrave, B.C., “The Role of Individual Non-Response Bias in Team-Level Research: The Process of Non-Response and the Conditions Under Which the Non-Response Biases Team-Level Correlations,” 2009 Proceedings of the National Decision Sciences Institute, November 2009.

Goyal, S., Aloysius, J., and Hardgrave, B.C., “Using RFID to Improve Inventory Accuracy,” Proceedings of the Fifteenth Americas Conference on Information Systems, August 2009.

Miller, R., Hardgrave, B.C., and Jones, T., “The Impact of Presentation Order on SERVQUAL Dimensionality,” 2008 Proceedings of the National Decision Sciences Institute, November 2008.

Hardgrave, B.C., Aloysius, J., and Goyal, S., “Improving Understated PI Accuracy: An Investigation of RFID’s Utility,” POMS Conference, May 2008.

Miller, R., Hardgrave, B.C., and Jones, T. “Levels of Analysis and their Impact on the Assessment of Service Quality,” 2007 Proceedings of the National Decision Sciences Institute, November 2007, 4371-4376.

Armstrong, D., Hardgrave, B.C., and Riemenschneider, C., “Is There a Business Case for RFID?” Proceedings of the Thirteenth Americas Conference on Information Systems, August 2007.

Hardgrave, B.C., Armstrong, D., and Riemenschneider, C., “RFID Assimilation Hierarchy,” Hawaiian International Conference on Systems Science, January 2007.

O’Leary-Kelly, A., Hardgrave, B.C., McKinney, V., Wilson, D., & Brooks, N. “The Influence of Professional Identification on the Retention of Women and Minorities in IT,” Academy of Management Conference, Honolulu, HI, August 2005.

Chilton, M.A., and Hardgrave, B.C., “Cognitive Style, the Work Environment and Strain: The Case of Object-Oriented Developers,” Proceedings of the Seventh Americas Conference on Information Systems, August 2001, 1284-1288.

Hardgrave, B.C., Taylor, A.R., and Kidd, J.H., “The Long Road to Software Process Improvement: A Chronology of One Company’s Efforts,” Proceedings of the Sixth Americas Conference on Information Systems, August 2000, 435-438.

Clemons Davis, C., and Hardgrave, B.C., “Prototyping as a Factor in Systems Development Success: A Test of Competing Models,” 1999 Proceedings of the National Decision Sciences Institute, November 1999, 692-694.

Hardgrave, B.C., and Riemenschneider, C., “Determinants of Systems Development Methodology Use,” Proceedings of the Fifth Americas Conference on Information Systems, August 1999, 615-617.

Chilton, M., and Hardgrave, B.C., “Understanding the Effects of a Paradigm Shift: The Case of Object-Oriented Technology,” Proceedings of the Fifth Americas Conference on Information Systems, August 1999, 606-608.

Hardgrave, B.C., “Adopting Object-Oriented Development: One Company’s Experience,” Proceedings of the Fifth Americas Conference on Information Systems, August 13-15, 1999, 568-570.

Johnson, R., Hardgrave, B.C., and Doke, E.R., “Developer Beliefs About OOSD: An Empirical Study,” 1998 Proceedings of the National Decision Sciences Institute, November 1998.

Douglas, D., and Hardgrave, B.C., “The Changing Language Mix in Information Systems Curricula,” 1998 Proceedings of the National Decision Sciences Institute, November 1998, 877-879.

Hardgrave, B.C., and Douglas, D., “Trends in Information Systems Curricula: Object-Oriented Topics,” 1998 AIS Americas Conference on Information Systems, August 1998, 686-688.

- Johnson, R., and Hardgrave, B.C., "What Developers Believe About OOSD: An Empirical Study," 1998 AIS Americas Conference on Information Systems, August 1998, 692-695.
- Glorfeld, L., Pendley, J., and Hardgrave, B.C., "Evaluating Financial Distress: A Comparison of Four Inductive Decision Models," 1997 Proceedings of the National Decision Sciences Institute, November 1997, 358-360.
- Johnson, R., and Hardgrave, B.C., "Evaluation of OOSD: Opinions, Cases, and Empirical Research," 1997 Proceedings of the National Decision Sciences Institute, November 1997, 660-662.
- Douglas, D., and Hardgrave, B.C., "Object-Oriented Trends: Information Systems Degree Programs," 1997 AIS Americas Conference on Information Systems, August 1997, 754-755.
- Satzinger, J., Doke, E.R., and Hardgrave, B.C., "Toward a Framework for Understanding Object-Oriented Development Practices," 1997 AIS Americas Conference on Information Systems, August 1997, 742-744.
- Hardgrave, B.C., "Object-Oriented Software Development: Process Improvement or Process Innovation?," Proceedings of the 1997 Information Resources Management Association International Conference, May 1997, 386-390.
- Doke, E.R., and Hardgrave, B.C., "The Evolution of COBOL," 1997 Proceedings of the Southeast Decision Sciences Institute, March 1997, 135-137.
- Craig, L.H., and Hardgrave, B.C., "Information Engineering and Object-Oriented Development: A Comparison," 1996 Proceedings of the National Decision Sciences Institute, November 1996, 688.
- Heilman, G., Foltz, C.B., and Hardgrave, B.C., "Object-Oriented Methodologies: A Comparison Based Upon Objective Measures," 1996 Proceedings of the National Decision Sciences Institute, November 1996, 820-822.
- Walstrom, K.A. and Hardgrave, B.C., "The Measure of MIS Academic Scientific Research Productivity," 1996 Proceedings of the National Decision Sciences Institute, November 1996, 743.
- Kletke, M.G., van Vliet, P., Schroeder, D., Phelps, J., and Hardgrave, B.C., "Virtual Group Projects: A Critical University Educational Experience," 1996 Proceedings of the National Decision Sciences Institute, November 1996, 743-745.
- Walstrom, K.A., and Hardgrave, B.C., "A Snapshot of MIS Researcher Agendas," 1996 AIS Americas Conference on Information Systems, August 1996, 149-151.
- Glorfeld, L.W., and Hardgrave, B.C., "Developing Better Neural Network Classification Models: An Example of Determining Commercial Loan Creditworthiness," 1995 Proceedings of the National Decision Sciences Institute, November 1995, 511-513.

- Hardgrave, B.C., "Empirical Comparisons of Object-Oriented and Entity-Relationship Data Models," 1995 Proceedings of the National Decision Sciences Institute, November 1995, 648.
- Glorfeld, L.W., and Hardgrave, B.C., "Predicting Commercial Loan Creditworthiness: A Comparison of Eight Inductive Decision Models," 1995 Proceedings of the Southwest Decision Sciences Institute, March 1995, 123-125.
- Hardgrave, B.C., "The Success of Prototyping," 1995 Proceedings of the Southwest Decision Sciences Institute, March 1995, 77-79.
- Walstrom, K.A., and Hardgrave, B.C., "The Evolution of MIS Research Topics: An Empirical Analysis," 1994 Proceedings of the National Decision Sciences Institute, November 1994, 828-830.
- Hardgrave, B.C., and Doke, E.R., "Towards a Model for Selecting a Systems Development Strategy," 1994 Proceedings of the National Decision Sciences Institute, November 1994, 1098-1100.
- Hardgrave, B.C., "Bank Failure Prediction Using Neural Networks," 1994 Proceedings of the Southwest Decision Sciences Institute, March 1994, 124-126.
- Hardgrave, B.C., and Dalal, N.P., "Understanding Data Models: An Empirical Analysis of Object-Oriented and Entity-Relationship Modeling," 1994 Proceedings of the Southwest Decision Sciences Institute, March 1994, 26-28.  
*\*This paper received the "1994 Irwin Distinguished Paper Award"*
- Hardgrave, B.C., and Dalal, N.P., "A Comparison of Object-Oriented and EER Modeling: An Initial Investigation," 1993 Proceedings of the National Decision Sciences Institute, November 1993, 762.
- Hardgrave, B.C., and Wilson, R.L., "A Survey of Guidelines for the Proper Usage of Information System Prototyping," 1993 Proceedings of the National Decision Sciences Institute, November 1993, 830-832.
- Hardgrave, B.C., "Expert System Applications in Production Scheduling," 1993 Proceedings of the National Decision Sciences Institute, November 1993, 1608-1610.
- Hardgrave, B.C., and Kletke, M.G., "A Dynamic Organizing Framework for Information Systems Research," 1992 Proceedings of the National Decision Sciences Institute, November 1992, 858-860.
- Hardgrave, B.C., "A Survey of Object-Oriented Design Methods," 1992 Proceedings of the National Decision Sciences Institute, November 1992, 970-972.

Doke, E.R., Swanson, N.E., and Hardgrave, B.C., "The Decision to Prototype Information Systems: A Pilot Study," 1992 Proceedings of the National Decision Sciences Institute, November 1992, 917-919.

Doke, E.R., Hardgrave, B.C., and Swanson, N.E., "Prototyping and the Systems Development Life Cycle: An Investigation of the Relationships," 1991 Proceedings of the National Decision Sciences Institute, November 1991, 839-841.

Hardgrave, B.C., and Doke, E.R., "Risk Assessment and Measurement for Information Systems Projects," 1990 Proceedings of the National Decision Sciences Institute, November 1990, 1134.

### **Patents Awarded**

- *Configurable Platform Architecture and Method of Use Thereof*; US Patent 9,378,055 B1; Issued June 28, 2016.
- *Configurable Platform Architecture and Method of Use Thereof*; US Patent 9,858,127 B2; Issued January 2, 2018 (extension of original patent # 9,378,055 B1).

### **Research Interests**

- Systems development
  - Object-oriented technology
  - Development process improvement
- RFID
  - Data analytics
  - Deployment
  - Business case / ROI
- Adoption and use of technological innovations, especially process innovations
- IS personnel (motivation, retention, turnover)

### **Research Honors and Awards**

2012 RFID Journal Special Achievement Award (given to individual having the biggest impact on the industry)

2009 Ted Williams Award – AIM Global (given to top researcher in auto ID field)

2007 Society for Information Management, Honorable Mention, Paper Awards Competition

1994 Irwin Distinguished Paper Award - Southwest Decision Sciences Institute

### **Invited Presentations** (research-related; external audiences)

- “Can Retailers be Omnichannel Ready without RFID?” RFID Journal Live Europe, London, U.K., November 13, 2019.

- “Can Retailers be Omnichannel Ready without RFID?” RFID Journal Live @ RetailX 2019, Chicago, IL, June 26, 2019.
- “Are Retailers Omnichannel Ready?” Retail Touchpoints Live @ RetailX 2019, Chicago, IL, June 26, 2019.
- “Resistance is Futile: Embracing the Inevitable Use of RFID in Apparel Retail,” RFID Journal Live, Phoenix, AZ, April 3, 2019.
- “Resistance is Futile: Embracing the Inevitable Use of RFID in Apparel Retail,” RFID Journal Live Europe, London, U.K., November 7, 2018.
- “Project Zipper: Project Update,” GS1 Connect, Phoenix, AZ, June 4, 2018.
- “Preparing for the Technology-Enabled Future of Retail,” RFID Journal Live Europe, London, U.K., November 16, 2017.
- “Preparing for the Technology-Enabled Future of Retail,” RFID in Retail and Apparel Conference, New York, NY, September 26, 2017.
- “Are you Ready for the New World of Retail?” RFID Journal Live, Phoenix, AZ, May 10, 2017.
- “Laying the Foundation for an Omnichannel Strategy with RFID,” RFID Journal Live Europe, London, U.K., November 10, 2016.
- “The State of RFID: Past, Present, and Future,” Avery-Dennison Board of Directors meeting, Los Angeles, CA, October 26, 2016.
- “Laying the Foundation for an Omnichannel Strategy with RFID,” RFID in Retail and Apparel Conference, New York, NY, October 6, 2016.
- “True Measures of EPC/RFID Success Beyond the Sales Lift,” GS1 Connect, Washington, D.C., June 1, 2016.
- “Retailer Use Cases: Benefits of Item-Level RFID,” pre-conference workshop, RFID Journal Live, Orlando, FL, May 3, 2016.
- “Supplier Uses Cases: Benefits of Item-Level RFID,” pre-conference workshop, RFID Journal Live, Orlando, FL, May 3, 2016.
- “RFID: The Omnichannel Enabler,” RILA Asset Protection Conference, Dallas, TX, April 19, 2016.
- “RFID in Apparel Retail: The First Steps,” webinar hosted by GS1 U.K., March 8, 2016.
- “RFID: The Omnichannel Enabler,” RFID Journal Live Europe, London, U.K., November 10, 2015.
- “RFID: Getting Maximum Value from a Disruptive Technology,” RFID Journal Live Brazil, Sao Paulo, Brazil, October 7, 2015.
- “RFID: The Omnichannel Enabler,” GS1 Brazil Retailer workshop, Sao Paulo, Brazil, October 6, 2015.
- “Can Online Retailers be Disrupted? RFID as a Disruptive Enabler,” RFID Journal Live for Fashion, New York, NY, September 17, 2015.
- “The Importance of Accurate Inventory Visibility,” GS1 Connect 2015, Austin, TX, June 3, 2015.
- “Retailer Use Cases: Benefits of Item-Level RFID,” RFID Journal Live, San Diego, CA, April 15, 2015.
- “Supplier Use Cases: Benefits of Item-Level RFID,” RFID Journal Live, San Diego, CA, April 15, 2015.
- “Can Online Retailers be Disrupted?” Dick’s Sporting Goods Innovation Speakers Series, Pittsburgh, PA, March 20, 2015.

- “RFID: Retailers – It is Not Too Late, But the Clock is Ticking,” RVCF Conference, Phoenix, AZ, November 3, 2014.
- “RFID: Suppliers – The Time is Now!” RVCF Conference, Phoenix, AZ, November 3, 2014.
- “The Value of RFID,” GS1 RFID Adoption Workshop, Phoenix, AZ, November 2, 2014.
- “Can Online Retailers be Disrupted?” RFID Journal Live Europe, London, U.K., October 23, 2014.
- “Inventory Accuracy and Omnichannel: The Role of RFID,” Motorola / Avery-Dennison Executive Leadership Summit, Chicago, IL, October 21, 2014.
- “The Value of RFID,” GS1 RFID Adoption Workshop, San Diego, CA, June 9, 2014.
- “Real-World RFID: The Retailer’s Story,” Checkpoint Webinar, April 23, 2014.
- “Can Online Retailers be Disrupted?” RFID Journal Live, Orlando, FL, April 9, 2014.
- “Supplier Use Cases: The Benefits of Item-Level RFID,” RFID Journal Retailer Workshop, Orlando, FL, April 8, 2014.
- “Retailer Use Cases: The Benefits of Item-Level RFID,” RFID Journal Retailer Workshop, Orlando, FL, April 8, 2014.
- “RFID: An Update, Direction, and Call for Action (Retailers),” RVCF Conference, Phoenix, AZ, November 13, 2013.
- “RFID: An Update, Direction, and Call for Action (Vendors),” RVCF Conference, Phoenix, AZ, November 13, 2013.
- “Item Level RFID Readiness for Retailers and Brands,” webinar hosted by GS1, November 12, 2013.
- “Item Level Readiness for Solution Providers,” webinar hosted by GS1, September 18, 2013.
- “RFID: Getting Maximum Value from a Disruptive Technology,” RFID Journal Live, Orlando, FL, May 1, 2013.
- “Core Store Operations,” RFID Journal Live, Orlando, FL, April 30, 2013.
- “Omni-channel Retail: The Role of RFID,” EPCglobal Board of Governors meeting, Dallas, TX, March 20, 2013.
- “RFID: Getting Maximum Value from a Disruptive Technology,” GS1 Global Standards Conference, Dallas, TX, March 19, 2013.
- “The State of the Retail Supply Chain and the Need for RFID ...” GS1 US Apparel User Group Meeting, New York, NY, January 15, 2013.
- “RFID for Retailers: Everything You Wanted to Know About RFID But Were Afraid to Ask,” VCF Conference, Phoenix, AZ, November 12, 2012.
- “RFID for Suppliers: Everything You Wanted to Know About RFID But Were Afraid to Ask,” VCF Conference, Phoenix, AZ, November 12, 2012.
- “RFID: Getting Maximum Value From a Disruptive Technology,” RFID Journal Live! Europe, London, U.K., October 30, 2012.
- “RFID – How to Pilot New Technology,” RETECH (Tyco) User Conference, Boca Raton, FL, October 9, 2012.
- “RFID for LP – Drivers & Deployment Considerations,” LP Magazine webinar, September 24, 2012.
- “Key Considerations for RFID Pilots and Deployments,” University of Arkansas RFID Annual Users Conference, Fayetteville, AR, September 11, 2012.
- “Deans’ Perspectives on the Positioning of IS within the Business School,” Americas Conference on Information Systems, Seattle, WA, August 10, 2012.

- “Key Considerations for RFID Pilots and Deployments,” RFID Journal webinar, June 12, 2012.
- “Update on RFID Rollouts,” UConnect conference, Dallas, TX, June 4, 2012.
- “International Supply Chain Management and the Role of RFID,” Chengdu Chamber of Commerce, Chengdu, China, April 13, 2012.
- “Key Considerations for RFID Pilots and Deployment,” RFID Journal Live!, Orlando, FL, April 3, 2012.
- “RFID Adoption in Retail: Past, Present, and Future,” University of Parma, Parma, Italy, March 29, 2012.
- “RFID for Retailers: Everything you Always Wanted to Know About RFID but Were Afraid to Ask,” VCF Conference, Orlando, FL, March 19, 2012.
- “The State of RFID,” VICS Logistics Meeting, Atlanta, GA, March 8, 2012.
- “RFID: How to Get Started (for Suppliers),” VCF Conference, Orlando, FL, March 19, 2012.
- “RFID: How to Deploy (for Retailers),” VCF Conference, Orlando, FL, March 19, 2012.
- “Supplier ROI RFID Study: Phase II,” Webinar, sponsored by GS1, December 15, 2011.
- “RFID: Making the Business Case for Retailers,” VCF Conference, Phoenix, AZ, November 14, 2011.
- “RFID: Making the Case for Merchandise Suppliers,” VCF Conference, Phoenix, AZ, November 14, 2011.
- “The Future of RFID,” Motorola Science Advisory Board Meeting, Chicago, IL, November 2, 2011.
- “Driving Increased Sales Through Display Execution with RFID,” Webinar, sponsored by Motorola, September 21, 2011.
- “Why EPC-Enabled RFID Now? The Business Case for RFID in Retail,” UConnect conference, Orlando, FL, June 2, 2011.
- “Beyond the Beep: A Practical Approach to RFID-Based EAS for the Apparel Industry,” Webinar, sponsored by Checkpoint, May 25, 2011.
- “Adding Value to EAS Solutions with RFID,” RFID Journal Live! Conference, Orlando, FL, April 12, 2011.
- “Supplier Business Case Study,” National Retail Federation, VICS Meeting, New York, NY, January 11, 2011.
- “RFID Applications,” AgGateway Conference, Tampa, FL, November 9, 2010.
- “Inventory Accuracy and RFID,” AIM Expo, Chicago, IL, November 3, 2010.
- “Past, Present, and Future: Perspectives on RFID Adoption,” Society for Information Management, Birmingham, AL, October 20, 2010.
- “RFID in Retail: The Past, the Present, and the Future,” Zebra Corp. Customer Conference, Chicago, IL, August 18, 2010.
- “RFID in Retail: The Past, the Present, and the Future,” ABRAS Conference (Brazilian Supermarket Association), Sao Paulo, Brazil, August 16, 2010.
- “All Things RFID: JCPenney Project and Industry Status,” UConnect Conference, San Antonio, TX, June 7, 2010.
- “RFID-Enabled Visibility and Inventory Record Inaccuracy: Experiments in the Field,” Production and Operations Management Society, Vancouver, Canada, May 9, 2010.
- “How Retailers Benefit from Using RFID to Improve Inventory Accuracy,” RFID Journal Live!, Orlando, FL, April 15, 2010.
- “RFID in Retail: Where We Are Today,” RFID Journal Live!, Orlando, FL, April 15, 2010.



- “RFID in Retail: What We Know So Far,” RFID Apparel/Footwear Supplier Workshop, Orlando, FL, April 14, 2010.
- “The Myths and Realities of RFID,” Arkansas Tech University, College of Business Distinguished Speaker Series, Russellville, AR, April 8, 2010.
- “The Value of EPC/RFID in the Apparel Industry,” EPCglobal US Apparel Industry Summit for EPC/RFID, Atlanta, GA, March 4, 2010.
- “2010: The Year of the Supplier,” National Retail Federation / VICS Item-Level RFID Committee Meeting, New York, NY, January 12, 2010.
- “Applications of RFID: From Fashion to Food,” Food Sciences Seminar Series, University of Arkansas (Food Sciences Department), Fayetteville, AR, December 7, 2009.
- “RFID Applications,” AgGateway Conference, New Orleans, LA, November 10, 2009.
- “RFID-Enabled Visibility and Inventory Accuracy: A Series of Field Experiments,” Duke University, Durham, NC, November 6, 2009.
- “How Retailers Benefit from Using RFID to Improve Inventory Accuracy,” RFID Journal Live – Europe, Frankfurt, Germany, October 20, 2009.
- “How Retailers Benefit from Using RFID to Improve Inventory Accuracy,” Excelion Retailing Seminar, Toronto, Canada, October 5, 2009.
- “How Retailers Benefit from Using RFID to Improve Inventory Accuracy,” RFID in Fashion Conference, New York, NY, August 13, 2009.
- “RFID Research Center at the University of Arkansas,” Bentonville Rotary Club, Bentonville, AR, June 10, 2009.
- “Making the Business Case for Item-Level Tagging,” UConnect 2009, Orlando, FL, June 3, 2009.
- “The Role of RFID in Food Safety,” FDA Food Protection Workshop, Fayetteville, AR, May 20, 2009.
- “Making the Business Case for Item-Level Tagging,” GS1 Board of Directors meeting, Toronto, Canada, May 8, 2009.
- “RFID: Past, Present, Future?” GS1, Toronto, Canada, May 7, 2009.
- “Making the Business Case for Item-Level Tagging,” RFID Journal Live! Conference, Orlando, FL, April 29, 2009.
- “The Current RFID Landscape: Overview and Update,” SPIRIT Conference, Oklahoma State University, Stillwater, OK, April 24, 2009.
- “RFID Research Center at the University of Arkansas,” Arkansas Academy of Computing, Fayetteville, AR, April 18, 2009.
- “The Quest for Improved Inventory Accuracy,” National Retail Federation, New York, NY, January 14, 2009.
- “Why Deploy RFID?” (joint presentation with Bill Holder, CIO, Dillard’s Inc.), VICS & AAFA Item-Level RFID Meeting, New York, NY, January 13, 2009.
- “The Business Case for RFID,” Doing Business in Bentonville Symposium, Bentonville, AR, November 19, 2008.
- “The ROI for Item-Level RFID,” International RFID Symposium (hosted by Hewlett-Packard), Sao Paulo, Brazil, October 22, 2008.
- “EPC’s Role in Loss Prevention,” EPC Connections, Chicago, Illinois, October 16, 2008.
- “An Introduction to the RFID Research Center, University of Arkansas,” AIDC-100 Meeting, Boston, MA, October 15, 2008.

- “Operational Improvements with RFID,” 2008 Colorado RFID Expo, Denver, CO, October 8, 2008.
- “The ROI for Item-Level RFID,” CSCMP’s Annual Global Conference, Denver, CO, October 8, 2008.
- “Supply Chain Challenges and the Role of RFID Technology,” RFID and Fast Moving Consumer Goods Symposium, Parma, Italy, October 1, 2008.
- “RFID for Loss Prevention: Business Case Considerations,” Item-Level RFID: The Road to ROI Conference, Fayetteville, AR, September 10, 2008.
- “Major Use Cases for RFID,” Item-Level RFID: The Road to ROI Conference, Fayetteville, AR, September 10, 2008.
- “RFID’s Role in Loss Prevention,” RFID in Fashion Conference, New York, NY, August 13, 2008.
- “An Overview of Item-Level Tagging,” VICS/AAFA RFID Committee Meeting, New York, NY, August 13, 2008.
- “Item Level Tagging: Feasibility, Use Cases, EAS,” UConnect 2008, Dallas, TX, June 11, 2008.
- “Item Level Tagging: Feasibility, Use Cases, EAS,” University of Parma, Italy, May 31, 2008.
- “RFID in the Supply Chain,” University of Parma, Italy, May 31, 2008.
- “Improving Understated PI Accuracy: An Investigation of RFID’s Utility,” Production and Operations Management Society, San Diego, CA, May 9, 2008.
- “RFID – Your Business, Your Future,” SPI The Plastics Industry Annual Business Conference, Napa, CA, May 6, 2008.
- “Item Level Tagging: Feasibility, Uses Cases, EAS,” Retail Industry Leaders Association – Loss Prevention Conference, Dallas, TX, April 30, 2008.
- “Does RFID Improve Inventory Accuracy?” RFID Journal Live!, Las Vegas, NV, April 18, 2008.
- “Item Level Tagging: Feasibility and Use Cases,” RFID Journal Live!, Las Vegas, NV, April 17, 2008.
- “RFID for Improved Fresh Item Quality,” RFID Journal Live!, Las Vegas, NV, April 16, 2008.
- “Research Directions in RFID,” SPIRIT Conference, Oklahoma State University, Stillwater, OK, March 13, 2008.
- “Item-Level Tagging: Feasibility, Use Cases, ROI,” Item-Level RFID: Future Direction – Current Status Conference, Fayetteville, AR, January 31, 2008.
- “Item-Level Tagging: Feasibility, Use Cases, ROI,” Voluntary Interindustry Commerce Solutions (VICS) Association RFID Conference, New York, NY, January 15, 2008.
- “Operational Improvements with RFID: Making the Business Case for RFID,” Decision Sciences Institute Conference (invited presentation), Phoenix, AZ, November 19, 2007.
- “Current Research Topics in RFID,” Decision Sciences Institute Conference (invited presentation), Phoenix, AZ, November 19, 2007.
- “RFID in the Cold Chain,” RFID Journal Live! Europe, Amsterdam, The Netherlands, November 6, 2007.
- “Item Level Tagging for Apparel and Footwear: Feasibility Assessment,” Center for Retailing Excellence Executive Advisory Board Meeting, Springdale, AR, October 10, 2007.

- “Operational Improvements with RFID: Making the Business Case for RFID,” University of Bremen, Bremen, Germany, August 29, 2007.
- “Item Level Tagging for Apparel and Footwear: Feasibility Assessment,” Apparel and Footwear Summit, New York, NY, August 20, 2007.
- “RFID: Understanding the Path to Business Value,” Distinguished Speaker Series, The Consortium for Supply Chain Management Studies, St. Louis University, St. Louis, MO, July 24, 2007.
- “RFID Research Center: Bridging the Gap between Academia and Industry,” M2M Conference, Chicago, IL, June 20, 2007.
- “RFID: An Overview and Uses for Food Safety,” Food Defense Workshop, University of Arkansas, Fayetteville, AR, May 24, 2007.
- “Operational Improvements with RFID: Making the Business Case for RFID,” Harvard University, Cambridge, MA, May 15, 2007.
- “RFID in Retail,” Loss Prevention Executive Roundtable, Rockville, MD, May 9, 2007.
- “RFID’s Impact in the Cold Chain: Lessons Learned,” RFID Journal Live! Conference, Orlando, FL, May 1, 2007.
- “RFID and the Cold Chain,” RFID Journal Live! Cold Chain Pre-Conference, Orlando, FL, April 30, 2007.
- “RFID: Understanding the Path to Business Value,” Danish Technologic Institute, Copenhagen, Denmark, March 15, 2007.
- “RFID: Understanding the Path to Business Value,” Identity Solutions Symposium and Workshop, Jonesboro, AR, February 22, 2007.
- “An Overview of RFID at the University of Arkansas: Activities and Research,” Lockheed-Martin Corporation, Dallas, TX, February 16, 2007.
- “RFID: An Overview and Applications,” Central Arkansas Institute for Internal Auditors, Little Rock, AR, February 14, 2007.
- “RFID for Improved Fresh Item Quality,” ADC Fresh Item Management Conference, Tampa, FL, January 23, 2007.
- “RFID: Item-Level Tagging Considerations,” National Retail Federation, New York, NY, January 16, 2007.
- “Show Me the Value! The Business Case for RFID,” Consumer Electronics Supply Chain Academy, Las Vegas, NV, January 10, 2007.
- “Does RFID Reduce Out of Stocks? (and other business cases for RFID)” RFID Logistics 2006, London, U.K., November 21, 2006.
- “RFID: Insights for Teaching and Research,” Decision Sciences Institute Faculty Development Workshop, San Antonio, TX, November 18, 2006.
- “The Business Case of RFID: Comparing European and American Business Models,” RFID Journal Live! Europe, Amsterdam, The Netherlands, October 27, 2006.
- “RFID: Understanding the Path to Business Value,” University of Parma, Italy, October 24, 2006.
- “Leveraging RFID in the Cold Chain ... and Other RFID Business Cases,” RFID Journal Industry Summit, Chicago, IL, September 28, 2006.
- “RFID: Understanding the Path to Business Value,” University of North Texas, Denton, TX, September 27, 2006.
- “RFID Technology and Food Safety,” National Public Policy Education Conference, Fayetteville, AR, September 19, 2006.

- “Show Me the Value! The Business Case for RFID,” RFID Investors Forum, New York, NY, September 15, 2006.
- “RFID: ROI for Suppliers? Insights and Considerations,” Symbol Technologies Canadian Supplier Forum, Toronto, Canada, September 14, 2006.
- “RFID Benefits in the Retail Supply Chain,” AIM Global Executive Summit, Washington, D.C., September 7, 2006.
- “An Overview of RFID at the University of Arkansas: Activities and Research,” The 9<sup>th</sup> Aerospace Automation Consortium, Chicago, IL, September 6, 2006.
- “RFID: Myths and Realities,” Arkansas State Legislators’ Joint Committee on Advanced Communications and Information Technology, Little Rock, AR, July 25, 2006.
- “The Three Waves of RFID: Preparing for a Sea of Change,” International Society of Weighing and Measurement, Dallas, TX, June 7, 2006.
- “An Overview of RFID Technology,” National Property Management Association, Fayetteville, AR, May 24, 2006.
- “RFID: Security and Privacy Realities,” Infragard Conference, Fayetteville, AR, May 17, 2006.
- “Does RFID Reduce Out of Stocks?” RFID Journal Live Conference, Las Vegas, NV, May 3, 2006.
- “RFID: Technology, Data, and Business Value,” Intel Corporation, Las Vegas, NV, May 2, 2006.
- “RFID in the Supply Chain: Issues and Opportunities,” RFID Academic Convocation, Las Vegas, NV, May 1, 2006.
- “RFID Research Center: Overview and Activities,” Walmart Supplier Conference, Dallas, TX, April 26, 2006.
- “The Myths and Realities of RFID,” The Center for Engineering Logistics and Distribution, Orlando, FL, April 18, 2006.
- “The Three Waves of RFID,” Distinguished Speaker Series - University of Arkansas at Little Rock, Little Rock, AR, April 14, 2006.
- “Does RFID Reduce Out of Stocks?” RFID Smart Labels Conference, Boston, MA, March 28, 2006.
- “RFID: Overview of the Technology and Implications for Business,” Women in IT Conference, Springdale, AR, March 10, 2006.
- “Show Me the Value! Reducing Out of Stocks and Other Business Cases for RFID,” MIT Forum for Supply Chain Innovation, Boston, MA, February 23, 2006.
- “Show Me the Value! Business Value from RFID,” Microsoft Partner Council, Austin, TX, February 20, 2006.
- “The Three Waves of RFID,” MIS Research Center Corporate Partners Meeting, University of Minnesota, Minneapolis, MN, February 17, 2006.
- “Does RFID Reduce Out of Stocks?” Information and Decision Sciences Department Research Workshop, University of Minnesota, Minneapolis, MN, February 17, 2006.
- “RFID in the Supply Chain: Issues and Opportunities,” RFID Academic Convocation, Boston, MA, January 23, 2006.
- “The Role of Auto-ID Technologies, RFID, Bar Code, Biometrics, and Smart Card in Quality Decision Making and Supply Chain Integration,” Decision Sciences Institute Conference, San Francisco, CA, November 21, 2005.

- “Utilizing RFID as a Facilitating Technology to Reduce Out of Stocks,” INFORMS Conference, San Francisco, CA, November 15, 2005.
- “The Three Waves of RFID,” The Ozarks Regional Purchasing and Supply Management Conference, Fayetteville, AR, November 2, 2005.
- “The Three Waves of RFID,” 5<sup>th</sup> Annual Emerging Trends in Retailing Conference, Fayetteville, AR, October 20, 2005.
- “Exploring the Myths and Realities of RFID,” Society for Information Management (SIM), St. Louis, MO, October 18, 2005.
- “RFID Data: What Does It Tell Us?” Retail Link Users Group Meeting, Fayetteville, AR, October 12, 2005.
- “RFID Strategic Overview and Insights,” ACNielsen Canadian Sales Advisory Board meeting, Toronto, Canada, September 27, 2005.
- “RFID: Myths and Reality,” Academic Alumni Reunion Conference, Sam M. Walton College of Business, University of Arkansas, Fayetteville, AR, May 20, 2005.
- “Can RFID Reduce Out of Stocks?” RFID Journal Live Conference, Chicago, IL, April 11, 2005.
- “RFID Strategic Overview and Insights,” AC Nielsen Consumer 360 Conference, Hollywood, FL, March 31, 2005.
- “RFID: Myths and Reality,” Women in IT Conference, Rogers, AR, March 11, 2005.
- “RFID: Dispelling Myths and Recognizing the (Real) Opportunities,” Oklahoma State University, Stillwater, OK, March 4, 2005.
- “FYI on RFID: TMI for IT?” Acxiom Connections Conference, Las Vegas, NV, February 28, 2005.
- “RFID: Myths and Reality,” ALAR Conference, Conway, AR, February 18, 2005.
- “Can you See the Line: Making the Business Case for RFID,” Nestle Executive Retreat, St. Louis, MO, February 15, 2005.
- “RFID: Myths and Reality,” Doing Business in Bentonville Supplier Seminar Series, Bentonville, AR, January 27, 2005.
- “RFID: Dispelling Myths and Preparing for the Future,” Council for Logistics Management, Rogers, AR, October 26, 2004.
- “The Future of RFID,” 4<sup>th</sup> Annual Trends in Retailing Conference, Fayetteville, AR, October 7, 2004.
- “Resistance to Change by IT Professionals: Explaining Software Developers’ Acceptance of Software Process Innovations,”
  - Virginia Tech University, January 29-30, 2004
  - University of Tulsa, February 7-8, 2004
  - Oklahoma State University, February 19-20, 2004

**TEACHING****Teaching Experience**

- Database Systems
- Graduate colloquium
- Honors colloquium
- Information Systems Management
- Intro to Computer Information Systems
- Microcomputers in Business
- Object-oriented Technology
- Production/Operations Management
- Research Seminar in IT Workforce
- Research Seminar in RFID
- Research Seminar in Systems Development
- RFID technology
- Seminar in Management Information Systems
- Seminar in Systems Development
- Systems Analysis & Design
- Systems Development

**Evidence of Teaching Performance**

- Sample teaching evaluations:

<b>Course [UG=undergraduate, M=masters, P=PhD]</b>	<b>Evaluation (5.0 scale)</b>
Honors colloquium – RFID [UG]	5.0
Research seminar – RFID [P]	5.0
RFID technology [M, UG]	4.9
Research seminar – systems development [P]	4.9
Object-oriented technology [M, UG]	4.6
Research seminar – IT workforce [P]	4.9

**Dissertation and Thesis Committees**

- Chair – Dissertation Committee (University of Arkansas): [REDACTED] (completed 2006)
- Chair – Dissertation Committee (University of Arkansas): [REDACTED] (completed 2006)
- Chair – Dissertation Committee (University of Arkansas): [REDACTED] (completed 2004)
- Chair – Dissertation Committee (University of Arkansas): [REDACTED] (completed 2001)

- Chair – Dissertation Committee (University of Arkansas): [REDACTED] (completed 2000)
- Chair – Dissertation Committee (University of Arkansas): [REDACTED] (completed 1997)
- Member – Dissertation Committee (University of Arkansas Engineering College – Industrial Engineering): [REDACTED] (completed 2012)
- Member – Dissertation Committee (Oklahoma State University): [REDACTED] (completed 2012)
- Member – Dissertation Committee (University of Bremen – Germany): [REDACTED] (completed 2011).
- Member – Dissertation Committee (University of Arkansas Engineering College – Computer Science): [REDACTED] (completed 2010)
- Member – Dissertation Committee (Oklahoma State University): [REDACTED] (completed 2010)
- Member – Dissertation Committee (University of Arkansas): [REDACTED] (completed 2009)
- Member – Dissertation Committee (University of Arkansas): [REDACTED] (completed 2008)
- Member – Dissertation Committee (University of Arkansas): [REDACTED] (completed 2007)
- Member – Dissertation Committee (University of Arkansas): [REDACTED] (completed 1997)
- Member – Dissertation Committee (University of Arkansas): [REDACTED] (completed 1996)
- Chair – Honors Thesis (University of Arkansas): [REDACTED] (completed 2009)
- Chair – Honors Thesis (University of Arkansas): [REDACTED] (completed 2007)
- Chair – Honors Thesis (University of Arkansas): [REDACTED] (completed 2007)
- Chair – Honors Thesis (University of Arkansas): [REDACTED] (completed 2007)
- Chair – Honors Thesis (University of Arkansas): [REDACTED] (completed 2007)
- Chair – Honors Thesis (University of Arkansas): [REDACTED] (completed 2006)
- Member – Masters Thesis (University of Arkansas Agricultural College): [REDACTED] (completed 2008)
- Member – Masters Thesis (University of Arkansas Engineering College): [REDACTED] (completed 2006)

### **Teaching: Honors and Awards**

- 1992 College of Business "Faculty of the Month" (April) - Business Student Council
- 1992 Faculty Appreciation Award - Office of Greek Life
- 1991 Outstanding Graduate Teaching Award - Golden Key National Honor Society

## SERVICE

### Institutional Service

#### **Key Institutional Service at Auburn University, 2010 – present**

- Athletics Strategic Advisory Committee (2017 – 2018)
- Auburn Research and Technology Foundation
  - President (2018 – present)
  - Board of Directors (2011 – 2017)
- University New Budget Model Committee [developed current budget model for AU] (2013 – 2016)
- University Senate (2011, 2012, 2013, 2015, 2016, 2018, 2019)
- University Strategic Budget Advisory Committee
  - Chair (2018 – present)
  - Member (2016 – 2017)

#### **Institutional Service prior to 2010**

##### Department

- Chair - Department Promotion and Tenure Committee (1998; 2009)
- Chair - PhD Committee (1999 – 2004); member (2004 – 2005)
- Chair - Faculty Search Committee (2000 – 2003); member (2005 – 2007)
- Chair - PhD Assessment Committee (1997); member (1998)
- Co-Chair - Undergraduate Curriculum Re-design Task force (2002 – 2004)
- Member - MIS Review Committee (2008 – 2009)
- Member - ISYS Faculty Search Committee (2007 – 2008)
- Member - ISYS Department Chair Search Committee (2006 – 2007)
- Member - Research Committee (2007 – 2010)
- Member - Department Peer Evaluation Committee (2000 – 2002; 2008 – 2010)
- Member - Department Curriculum Committee (1997)
- Coordinator - Visiting Scholars Series (2002 – 2004)
- Department webmaster (1997)

##### College

- Chair - Faculty Internship Program Task Force (1998)
- Chair - MBA Redesign Team (1996 – 1998)
- Chair - SAP Initiative Task Force (1999)
- Member - International Programs Committee (2006 – 2010)
- Member - Committee on Teaching (1995 – 2009)
- Member - Paul Cronan Endowed Chair Reappointment Committee (2008)
- Member - Strategic Planning Team (1993 – 2005)
- Member - Doctoral Program Committee (1998 – 2004)
- Member - Scot Burton Endowed Chair Reappointment Committee (2003)
- Member - Walton College Brand Identity Committee (2000 – 2001)
- Member - BS in International Business Task Force (1999)



- Member - Supply Chain Management Research Center 3-year Review Committee (1999)
- Member - Technology Committee (1996 – 1999)
- College webmaster (1997)

#### University

- Chair - Research Council and Chief Research Integrity Officer (2009 – 2010); Member (2007 – 2009)
- Faculty Senate - Executive Committee [elected] (2008 – 2009)
- Faculty Senator [elected] (2005 – 2010)
- Campus Council [elected] (2007 – 2009)
- Member - Conflict of Interest and Commitment Review Committee (2004 – 2010)
- Member - Acxiom / UA Relationship Team (2002 – 2010)
- Steering Committee Member - Center for Innovations in Healthcare Logistics (2007 – 2010)
- Member - Technology Fee Review Committee (2000 – 2004)
- Member - University Committee on Continuing Education (1997 – 2002)
- Member - Faculty Panel for Complaint Procedures for Undergraduate Students (1997 – 2002)
- Member - Task force to study University of Arkansas “Early Retirement Policy” (1997 – 1999).

#### **Professional Activities**

- Professional boards and committees (non-compensated):
  - AACSB Committee on Accreditation Policy: 2017 – 2018
  - AACSB Continuous Improvement Review Committee: 2014 – 2017
  - AACSB Peer Review Team: 2012 – 2018
  - GS1 Executive Leadership Committee: 2013 – present
  - Oakworth Bank Board of Advisors: 2016 – 2019
  - RFID Professional Institute Board of Directors: 2015 – 2017
  - SACS Accreditation Review Team: 2012
  - Societal Innovations Board of Advisors: 2011 – present
  - Seeonic Board of Advisors: 2012 – 2014
  - XYCast Board of Directors: 2013 – 2014; Board of Advisors: 2014 – 2016
- Journal Editorship / Boards

#### Editor

- International Journal of RF Technology: Research and Applications (2008 – 2010)

#### Associate Editor

- Information Systems Research (special issue on Flexible and Distributed Information Systems Development)
- International Journal of RF Technology: Research and Applications (2010 – present)

- Journal of Management Information Systems (2004 – 2012)

Editorial Review Board

- International Journal of Global Logistics & Supply Chain Management
- Journal of Computer Information Systems
- Journal of Database Management

- Reviewer:

Journals (ad hoc)

- Communications of the ACM
- Computers & Operations Research
- Electronic Commerce Research and Applications
- European Journal of Information Systems
- IEEE Software
- IEEE Transactions on Engineering Management
- The DATA BASE for Advances in Information Systems
- Decision Support Systems
- Information Systems Research
- Information Technology & People
- INFORMS Journal on Computing
- International Journal of Radio Frequency Identification Technology and Applications
- Journal of Business Logistics
- Journal of Systems & Software
- MIS Quarterly

Conferences

- Americas Conference for Information Systems (AMCIS)
- Decision Sciences Institute (DSI)
- Diffusion Interest Group in IT (DIGIT)
- International Conference on Information Systems (ICIS)
- Internet of Things Conference
- The Impact of Virtual, Remote, and Real Logistics

Books

- Course Technologies publishers
- IRWIN publishers
- John Wiley & Sons publishers
- Simon & Schuster publishers

Grants

- American Association for the Advancement of Science
- Austrian Research Promotion Agency
- Canadian Research Council
- Indiana Economic Development Corporation
- Research Grants Council of Hong Kong
- Swiss National Science Foundation

- Served as external reviewer for tenure and/or promotion cases from Brigham Young University, Oklahoma State University, Purdue University, Virginia Tech, University of North Carolina – Greensboro, University of Tulsa, and Mississippi State University
- Paper coordinator: Diffusion Interest Group in IT (DIGIT), 2003 (Seattle, Washington)
- Track Chair:
  - *Object-Oriented Software Development*, 1998, 1999, 2000, 2001 AIS Americas Conference on Information Systems
  - *The Transition to Object-Oriented Software Development*, 1997 AIS Americas Conference on Information Systems
  - *Radio Frequency Identification*, 2006, 2007, 2008, 2009, 2010 Hawaiian International Conference on System Sciences
  - *Radio Frequency Identification*, 2007, 2008, 2009, Americas Conference on Information Systems
- Senior Editor: Software Development track at ICIS 2004
- MIS Camp Counselor, 1998, 1999, 2000, 2009 at AIS Americas Conference on Information Systems
- Faculty mentor, New Faculty Consortium, 2006, International Conference on Information Systems
- Member – National Task Force on Basic Mathematics and Science Competencies (1997-1999)
- Program committee
  - Tenth International Workshop on Exploring Modeling Methods in Systems Analysis and Design (EMMSAD '05)
  - IEEE PerCom Workshop on Pervasive RFID (2007)
  - Internet of Things Conference (2008)
- Conference Co-Founder: RFID Academic Convocation
  - Conference Co-Chair: RFID Academic Convocation I, Boston, MA (January 23-24, 2006)
  - Conference Co-Chair: RFID Academic Convocation II, Las Vegas, NV (May 1, 2006)
  - Conference Co-Chair: RFID Academic Convocation III, Beijing, China (October 30-31, 2006)
  - Conference Co-Chair: RFID Academic Convocation IV, Orlando, FL (May 1, 2007)
  - Conference Co-Chair: RFID Academic Convocation V, Chicago, IL (October 2, 2007)
- Member: Association for Computing Machinery (ACM)

Association for Information Systems (AIS)  
 Decision Sciences Institute (DSI)  
 IEEE - Computer Society  
 Institute for Operations Research and Management Sciences (INFORMS)  
 International Association for Computer Information Systems (IACIS)

- Founder: Global RF Lab Alliance (2007) with University of Parma, Italy and University of Bremen, Germany
- Awards judge: RFID Journal “Innovation in RFID Awards” (annually from 2007 – present)
- Subject matter expert: wireless technologies (for Deloitte Consulting) (2010)
- Expert panel: National Center for Food Protection and Defense Operability study (2011 – 2012)
- Walmart Supplier Collaboration Board – Member (2008 – 2010)
- Voluntary Interindustry Commerce Solutions Item-Level RFID Committee (2008 – 2014)
  - Co-chair – Business Case Committee (2008 – 2011)
  - Co-chair – Education Committee (2011 – 2014)

### **Public / Community Service**


- Member - Accelerate Arkansas Committee (2006 – 2008)
- Member - Northwest Arkansas Museum Foundation (2006 – 2008)
- Member - Springdale High School Business Advisory Council (2007 – 2010)
- Member - Springdale High School IT Academy Advisory Committee (2007 – 2010)
- Member - Arkansas Venture Forum Planning Committee (2006)
- Member - City of Fayetteville Ad Hoc Y2K Committee (1999)
- Moderator - Arkansas Venture Forum Supply Chain Technology Panel (2006)

### **Miscellaneous Honors and Awards**

- 2019 Auburn University honored me by putting my name on the new business building: Horton Hardgrave Hall (~100,000 s.f., \$45 million building)
- 2015 “100 for 100” – top 100 graduates in the past 100 years: Spears School of Business, Oklahoma State University
- 2009 Inducted into Arkansas Academy of Computing
- 2008 “One to Watch” (selected as 1 of 8 people internationally as having a major impact on the RFID industry), RFID Journal, December 2008.
- 2006 Outstanding Team Achievement Award [RFID Lab] – Walton College of Business, University of Arkansas
- 2003 “40 under 40” - Northwest Arkansas Business Journal (recognizes top 40 business leaders under the age of 40)

- 2001 Outstanding Team Award [Walton College Brand Team] - Walton College of Business, University of Arkansas
- 1997 H.L. and Janelle Hembree Outstanding "All Around" Faculty Award - Walton College of Business Administration, University of Arkansas
- 1993 Phoenix Outstanding Doctoral Student Award - Oklahoma State University Graduate College
- 1992 Decision Sciences Institute Doctoral Student Consortium
- 1990 OSU Foundation Graduate Fellowship

Bill C. Hardgrave  
Auburn University  
Auburn, AL 36849



October 1, 2021

Porsha Williams  
Vice President  
Parker Executive Search  
Atlanta, GA

Dear Porsha:

Thank you for contacting me regarding the opportunity at the University of Memphis. Based on our conversation and my own assessment of the position, I am pleased to submit my materials for consideration.

My academic career has been spent at public institutions. I am a proven leader in higher education, who has been described as an entrepreneurial, visionary, enthusiastic, servant leader. I rose through the faculty ranks, from assistant professor to endowed chair holder at the University of Arkansas. While doing so, I was recognized for excellence in the classroom, in research, and in service. At Auburn University, I served as Dean of the Harbert College of Business for almost eight years. As Dean, I set a high standard in ethics, and demonstrated clear values, principled leadership, and a commitment to equity, inclusion, diversity, and shared governance. As a result, student enrollment grew in quantity and quality, retention and graduation rates improved, research increased, faculty satisfaction skyrocketed, several programs moved into the top 10, and the college has never been in a better financial position. As Provost, our office has become “customer-centric” by focusing on changing how we serve the university community of students, faculty, and staff. Processes, once black boxes of activity, are now transparent, consistent, and timely. Furthermore, our responsibility-based budget, of which \$850 million flows through my office, has spawned a new era of accountability, entrepreneurial thinking, and financial transparency among our colleges, schools, and major units. I have worked closely with state and federal legislators and government liaisons on accountability-related higher education initiatives, funding priorities, state appropriations, and budgets. Our office has also led the development of a new strategic plan for the university (adopted by the Board of Trustees in 2019), created a dual enrollment program for high schools and a pathway program with the Alabama two-year system, and launched an initiative to increase our faculty research capacity.

As a first-generation college student, I understand and appreciate the impact of higher education on one’s life by creating upward social mobility. The University of Memphis has served its students well and has built an impressive student body. UofM is changing lives. Undoubtedly, this is a university on the move. UofM’s size and reputation have grown over the past several years and it will be important for the next president to accelerate the trajectory in its pursuit of academic and research excellence, student success, and diversity and inclusion. As illustrated in my CV, I have been an academic builder with a demonstrated ability to advance an institution. With tremendous upside for the future, it is an exciting time for UofM. Please accept this letter as a formal indication of my interest in the position of President of the University of Memphis.

Sincerely,

Bill C. Hardgrave

## 5. Presidential Candidate # 3- Dr. Teik Lim

For Discussion

Presented by Doug Edwards

**Teik C. Lim, Ph.D.**

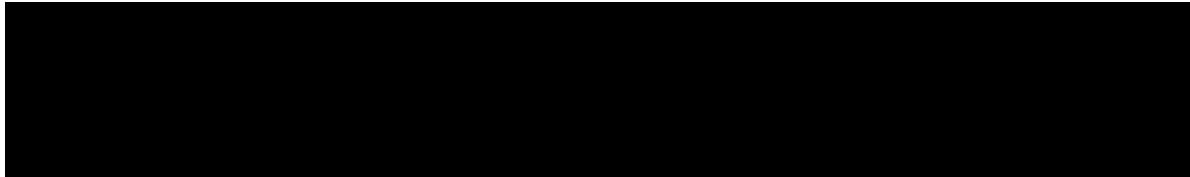
President *ad interim*

Professor of Mechanical and Aerospace Engineering

The University of Texas at Arlington, Texas, USA

Fellows of the National Academy of Inventors (NAI), America Society of Mechanical Engineers (ASME),  
and Society of Automotive Engineers (SAE International)

Licensed Professional Engineer in Texas, Ohio, and Alabama



## EDUCATION

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- 1989** Ph.D., Mechanical Engineering, The Ohio State University (OSU)  
*Dissertation:* Vibration Transmission Through Rolling Element Bearings in Geared Rotor Systems  
(received the Graduate Council Distinguish Dissertation Award)
- 1986** M.Sc., Mechanical Engineering, The University of Missouri–Rolla (UMR)  
*Thesis:* Dynamics of Systems with Rotating Pendulums as Vibration Absorbers
- 1985** B.Sc. (High Honor), Mechanical Engineering, Michigan Technological University (MTU)

## ACADEMIC APPOINTMENTS (SEE PAGES 5–9 FOR INITIATIVES AND ACCOMPLISHMENTS)

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- 2020 – present Interim President (since May 1, 2020), University of Texas at Arlington  
Campus Administrator-in-Charge (March 20 – April 30, 2020)
- 2017 – 2020 Provost and Vice President for Academic Affairs, University of Texas at Arlington
- 2017 – present Professor, Dept. of Mechanical and Aerospace Engineering, University of Texas at Arlington
- 2014 – 2017 Dean, College of Engineering and Applied Science, University of Cincinnati
- 2012 – 2014 Interim Dean, College of Engineering and Applied Science, University of Cincinnati
- 2011 – 2012 Associate Dean for Graduate Studies and Research, College of Engineering and Applied Science,  
University of Cincinnati
- 2009 – 2017 Herman Schneider Professor of Mechanical Engineering, College of Engineering and  
Applied Science, University of Cincinnati
- 2010 – 2012 Director, School of Dynamic Systems (previously Department of Mechanical Engineering),  
College of Engineering and Applied Science, University of Cincinnati
- |             |                     |   |  |
|-------------|---------------------|---|--|
| 2005 – 2010 | Department Head     | } | Department of Mechanical Engineering                                 |
| 2004 – 2017 | Professor           |   | (previously Dept. of Mechanical, Industrial & Nuclear Engineering)   |
| 2002 – 2004 | Associate Professor |   | College of Engineering and Applied Science, University of Cincinnati |



1998 – 2002	Associate Professor	Department of Mechanical Engineering, College of Engineering, University of Alabama
1998 – 2002	Adjunct Faculty	Department of Mechanical Engineering, College of Engineering, Ohio State University

## INDUSTRY & RESEARCH APPOINTMENTS

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1997 – present	Founding Director, Hypoid and Bevel Gear Mesh and Dynamic Modeling Consortium	
1996 – present	Founding Director, Vibro-Acoustics and Sound Quality Research Laboratory	
2008 – 2017	Executive & Founding Director, UC Simulation Center (A UC–P&G Collaboratory) , University of Cincinnati	
1996 – 1998	Research Scientist, Center for Automotive Research (CAR), Ohio State University	
1996 – 1998	Director, Automotive NVH Laboratory, Ohio State University	
1993 – 1996	Sr. Project Engineer	} Advanced Test and Analysis Group, Structural Dynamics Research Corporation (SDRC)
1990 – 1993	Project Engineer	

## HONORS AND AWARDS

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- Each Moments Matter Award, Forefront Living Foundation, 2021
- Dallas 500 (one of 500 most influential leaders in North Texas), D CEO Magazine, 2020, 2021
- Asian American Outstanding Achievement Award, USPAACC-SW, 2020
- Honorary International Chair Professor, National Taipei University of Technology, 2019
- Distinguished Alumni Award for Academic Excellence, Ohio State University, 2019
- National Academy of Inventors (NAI) Fellow, 2018
- Phi Kappa Phi, Honorary Member, 2017
- Golden Key International Honor Society, Honorary Member, 2017
- Dean Teik Lim Outstanding Scholarship (\$1K per year) for a top JCI Student at Univ. of Cincinnati, 2017
- GearLab Distinguished Alumnus Award, Ohio State University, 2017
- Omicron Delta Kappa, National Leadership Honor Society, University of Cincinnati, 2015
- Fellow of the Graduate School, University of Cincinnati, 2014
- Order of the Engineer Fellowship, University of Cincinnati, 2013
- P&G Connect+Develop Private/Public Partnership Award, 2012
- Thomas French Alumni Achievement Award, Ohio State University, 2010
- Herman Schneider Professorship, University of Cincinnati, 2009
- ASME (American Society of Mechanical Engineers) Fellow, 2006
- SAE International (Society of Automotive Engineers) Fellow, 2006
- SAE International (Society of Automotive Engineers) Excellence in Oral Presentation, 2005
- SAE International (Society of Automotive Engineers) Arch T. Colwell Merit Award, 2003

- SAE International (Society of Automotive Engineers) Ralph R. Teetor Educational Award, 2002
- Tau Beta Pi (National Engineering Honor Society) Eminent Engineer, 2002
- ASEE (American Society for Engineering Education) Ferdinand P. Beer and E. Russell Johnston, Jr. Outstanding New Mechanics Educator Award, 2001
- ASEE Southeastern Section New Faculty Research First Place Award, 2001
- Tau Beta Pi Outstanding Faculty Member Award, 2001
- Best Technical Presentation Award, SDRC 7<sup>th</sup> Technology Conference, 1991
- Ohio State University Graduate Council Distinguish Dissertation Award, 1990
- Presidential Fellowship (Ph.D. study), Ohio State University, 1989
- Faculty Research Fellowship (M.Sc. study), University of Missouri–Rolla, 1986
- Undergraduate Student Merit Scholarship, Michigan Technological University, 1983–1985
- Phi Eta Sigma, National Honor Society, 1984
- Dean’s List and High Honor, Michigan Technological University, 1984–1985
- National Dean’s List, 7<sup>th</sup> edition, Vol. 2, Educational Communication Inc., 1983–1984

#### **PUBLICATIONS AND SCHOLARLY ACTIVITIES (SEE PAGES 10–35 FOR FULL LISTING) —————**

- Refereed Journal Papers = 158
- Refereed Conference Proceedings = 94
- Conference Papers/Presentations = 68
- Invited Lectures & Seminars = 71

#### **DISSERTATIONS & THESES SUPERVISED (SEE PAGES 37–43 FOR COMPLETE DETAILS) —————**

- Doctoral Dissertations Supervised = 27
- Doctoral Dissertation Supervisory Committees Served = 14
- Master’s Theses Supervised = 22
- Master’s Thesis Supervisory Committees Served = 25
- Post-Doctoral Fellows and Research Scholars Supervised = 46

#### **SPONSORED RESEARCH (SEE PAGES 35–36 AND 44–49 FOR COMPLETE DETAILS) —————**

- Total Funding of Research Contracts and Grants Awarded = ~\$20million
- Number of Projects = 50+
- Number of Patents = 9 granted in four countries and 2 pending in Germany
- Research Consortia, Institutes, Centers and Laboratories:
  - Vibro-Acoustics and Sound Quality Research Laboratory
  - Hypoid and Spiral Bevel Gear Mesh and Dynamics Industry/University Consortium
  - UC Simulation Center, A UC-P&G Collaboratory, University of Cincinnati
  - Siemens PLM Simulation Technology Center University of Cincinnati
  - PACE Global Design and Manufacturing Center, University of Cincinnati
  - Center for Advanced Vehicle Technologies, University of Alabama
  - Machine Process and Product Design Center, University of Alabama
  - Alabama Institute of Manufacturing Excellence, University of Alabama
  - Center for Automotive Research, Ohio State University

## SPECIALTY AREAS

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Precision machine design and dynamics, Gear noise and vibrations, Structural vibrations and acoustics, Active noise and vibration control, Automotive NVH (noise/vibration/harshness), and Product sound quality.

## SELECT PROFESSIONAL AND SERVICE ACTIVITIES (SEE PAGES 49–54 FOR FULL LISTING)

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- Texas Credentials for the Future, Steering Committee, 2021–present
- *Inter-Noise 2021 Congress*, International Advisory Board, 2021
- Texas International Education Consortium, Board of Directors, 2020–present
- North Texas LEAD, Board of Directors 2020–present
- Dallas Regional Chamber (including Dallas Thrives), Board of Directors 2020–present
- Texas Health Resources, Community Impact Board of Trustees, 2020–present
- Greater Arlington Chamber of Commerce, Executive Committee, Board of Directors, 2020–present
- Excelencia in Education, Board of Presidents, 2020–present
- Center for Entrepreneurship and Economic Innovation, Collaborators Committee, 2020–present
- APLU, Powered by Publics Initiative, Metropolitan Cluster 7, Lead, 2020–present
- Council of Public University Presidents and Chancellors, Texas, 2020–present
- Sunbelt Athletic Conference, NCAA Division I, Board Member, 2020–present
- *ASME International Power Transmission and Gearing Conference*, Organizing Committee, Anaheim, 2019
- *ASME International Power Transmission and Gearing Conference*, General Chair, Cleveland, 2017
- *ASME International Power Transmission and Gearing Conference*, Program Chair, Boston, 2015
- University of Cincinnati Foundation Board of Trustees, 2015–2017
- I-INCE FCTP Committee Advisory Board, 2017–2020
- Gear Research Institute, Board of Trustees, 2012–present
- Univ of Cincinnati Research Institute (UCRI), Transition Team & Board Member (ex-officio), 2012–2017
- TechSolve Inc., Board of Directors, 2012–2017
- ASME Power Transmission and Gearing Conference Committee, 2002–present
- ASME Power Transmission and Gearing Committee, Vice-Chair (2014–2016), Chair (2016–2018)
- American Society of Mechanical Engineers (ASME), 1989–present (Fellow since 2006)
- Acoustical Society of America (ASA), 1990–present
- ASA Structural Acoustics and Vibration Technical Committee, 2005–2023
- Institute of Noise Control Engineering (INCE), 1989–present
- INCE Board of Directors (Member), 2011–2012, 2013–2014
- INCE Vice-President, Publications 2014–2017 and Technical Activities 2010–2013
- American Association for the Advancement of Science (AAAS), 2011–present
- Tau Beta Pi, National Engineering Honor Society, 2002–present
- International Institute of Acoustics and Vibration (IIAV), 2002–present
- American Society of Engineering Education (ASEE), 1999–present
- Society of Automotive Engineers (SAE International), 1990–present (Fellow since 2006)

## ADMINISTRATIVE EXPERIENCE (INITIATIVES AND ACCOMPLISHMENTS)

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### UNIVERSITY OF TEXAS AT ARLINGTON (2017–PRESENT)

#### **President *ad interim*** (2020–present)

Appointed by the Chancellor and approved by the Board of Regents of the University of Texas System. The University of Texas at Arlington (UTA) is a comprehensive, Carnegie R-1, Texas Tier One, Hispanic-serving institution (HSI) and Asian American and Native American Pacific Islander-serving institution (AANAPISI) with a total (global) enrollment of 60,000 students (more than *14,000 degrees conferred in academic year 2020-2021, and is the 5<sup>th</sup> most diverse student body among US national universities*), 9 degree-granting colleges/school, 180+ undergraduate and graduate degree programs, 1800 faculty members (*4 national academy engineering, 2 national academy of medicine, 1 national academy of sciences, 19 national academy of inventors, 60 endowed chairs/professorships*), \$125million/year in research expenditures, \$720million/year operating budget, and \$170million in endowments. The University operates from its main Arlington campus, UTA Fort Worth center, UTA Research Institute in Fort Worth, an outreach office in Dallas, and multiple locations in Texas and overseas.

#### **Key Initiatives (President *ad interim*):**

- Successfully focused on four primary goals: (1) navigated UTA through the Covid-19 pandemic to ensure students continue to learn and attainment of their degrees is not delayed –research (+6% increase totaling \$125M in 2020) and student success metrics (+2.9% for 4-year grad rate +1.3% for 6-year grad rate) reached record levels this past year, and faculty and staff morale and attitude are up significantly; (2) emphasized the collective vision of UTA community that supports student success and research excellence equally; (3) led the campus to maintain and meet the required criteria to achieve Texas Tier One – only the fourth institution in Texas to earn this distinction – affirming its place among an elite group of national research institutions; and (4) enhanced external engagements to strengthen existing and new research and career services partnerships, to increase philanthropy in support of UTA mission as a public higher ed institution, and to build support from legislators and public officials.
- Led a refreshed of the University Strategic Plan 2025 (*Bold Solutions | Global Impact*) with broad participation from UTA community to focus on a framework of six fundamental guiding principles (*student access & success; research & creative works; a community of scholars; a global university; engagement & outreach; inclusive excellence*) along with five research and creative work themes (*health & human conditions; sustainable environment; data driven discovery; global environmental impact; cultural understanding & social transformations*).
- As part of UTA inclusive excellence initiative with input from faculty, staff, students, alumni and key stakeholders, made 8 specific commitments to promote diversity, equity and inclusion (DEI) at UTA: *create a vice president-level DEI office (hiring of the inaugural VP completed); establish a DEI committee; designate \$25million in new scholarships to address student diversity; strengthen student programming in multicultural affairs office; enhance recruiting, retention and promotion of underrepresented faculty & staff; incorporate diversity content into a new student course; implement diversity & inclusion training for faculty/staff; ensure campus police department is aligned with University core values*. In addition, as part of the above DEI initiatives, enhanced and expanded the support for Women’s Faculty and Staff Network, Staff Advisory Council, Student Access and Resource Center including services for students with disability, and Counseling and Psychological Services.
- Significantly expanded existing and created new community partnerships directed at enhancing students access and success. Some of the key collaborations include: *Tarrant County To and Through (T-3)* to increase high school and college completion rates, and to increase the quality and quantity of workforce ready talents; *TCC to UTA* to ensure smooth and successful transition of community college students to the University via unique agreements dealing with data sharing, advising and transfer credits; *Go*

*Centers* in school districts to assist students in college admission and financial aid applications; *University Crossroads* (national award winning initiative) to increase college graduates and strengthen workforce through partnerships with corporations/schools/non-profits; and numerous academies (*STEM, Dual Credit, Early College High School*) with school districts to enhance pathways to UTA.

- Continued to migrate the University to an incentive-based budget model (*responsibility centered management RCM*) that is more transparent, decentralized, shared governance, efficient and nimble to better support the mission of UTA and Strategic Plan 2025, and to encourage innovative and entrepreneurial strategies. A set of dean's metrics were created to enable tracking of enrollment, research, philanthropy and financial performances. Launch date: Sept 2021, start of FY 2021-22.
- Maintained a stable and positive financial condition for the University in spite of the impact of the pandemic: Aa2 rating, spendable cash/investments to operating expenses ratio at 1.2 for 2020 and was 1.0 for 2019, and spendable cash/investments to total debt ratio at 3.1 in 2020 compared to 2.6 in 2019.
- Initiated the preparation for a first ever comprehensive fundraising campaign targeted for a launch in 2-3 years. The efforts include training and equipping deans and development directors, increasing the engagement of alumni and friends of the University, and positioning relevant assets to support the capital campaign.
- Established the Center for Entrepreneurship and Economic Innovation to foster a vibrant and supportive atmosphere for students, scholars and researchers as they drive innovation, commercialization and creation of new companies in partnerships with private and public stakeholders in North Texas.
- Formed a task force and initiated an e-learning transformational platform project to prepare the University to become a novel learning ecosystem post pandemic with heavy reliance on digital tools in teaching, learning and research both on and off-campus.
- Successfully secured funding (\$76million from gifts, UT System PUF fund, bonds, institutional reserve) to construct a new teaching and research building situated in the Health Sciences Quad to house the School of Social Work and Nursing Smart Hospital.
- Oversaw the successful completion of two major building renovations: (1) \$26million conversion of Trinity Hall (formerly a residence hall) into an administrative building for housing division of faculty affairs, the Center for Research on Teaching and Learning Excellence, Information Technology, University Analytics, Center for Distance Education and Academic Personnel; and (2) \$9.5million enhancement and expansion of the east side of University Center including the front entrance and ballroom to better serve our students and house campus and community events.
- Serving as the CEO representing UTA in the Sun Belt Conference (NCAA Division I). UTA intercollegiate athletics program competes in 13 sports (6 men's, 7 women's). Hired 2 head coaches for the women's and men's basketball programs in 2020 and 2021, respectively. Launched an athletic master plan involving fundraising and redesigning in support of the sporting facilities on west campus.

### **Provost and Vice President for Academic Affairs (2017–2020)**

Served as UTA's Chief Academic Officer with primary responsibility in the management of all matters pertaining to the academic programs and accreditations, colleges/schools/library including academic resources, academic planning and policies, faculty hiring and development, teaching and learning center, student success and access, institutional effectiveness and reporting, and international collaborations and academic expansions. Also, served as the acting President on campus with signature authority while the President is away.

### **Key Initiatives (Provost):**

- Assisted the President in conducting a mid-term review and extended the University Strategic Plan 2020 (*Bold Solutions | Global Impact*) through year 2025. The enhanced strategic plan continued the focus on the existing research themes (*health & human conditions, data driven discovery, sustainable urban environment, global environmental impact*), and guiding aspirations on building faculty excellence, strengthening academic programs, and expanding global visibility and impact.
- Enhanced Academic Affairs to support the University strategic plan to become a Model 21<sup>st</sup> Century Urban Research University by improving the quality of academic programs, instilling a pervasive interdisciplinary mindset on campus, nurturing innovation and entrepreneurship, and strengthening meaningful global engagement. In year one of my term as Provost, hired 3 new deans, 4 senior staff in the Provost Office and 140 new faculty members – many are themselves very interdisciplinary, innovative and entrepreneurial – in order to drive and implement the above priorities. Faculty hiring continued at similar pace for years 2 and 3 (academic years 2018/19 and 2019/20).
- Led and/or championed the development of new interdisciplinary degree programs in data science, data analytics, learning analytics, sustainable urban design, special education, public health, philanthropy, interdisciplinary degrees that map into the research themes, and the joint JD-MBA & JD-MS Taxation programs with Texas A&M Law School in Fort Worth.
- Enhanced scope and support for the Center for African American Studies and Center for Mexican American Studies to better serve students/faculty and engage with relevant community members.
- Transformed University College into the new Division of Student Success to lead the campus on a path towards moving the needle on student success (*nearly 5% increase in graduation & persistence rates, since 2017*). To achieve this goal, implemented numerous novel ideas including applying predictive analytics tools, introducing high impact practices, implementing graduation help desk, embedding peer tutoring and supplemental instructions in classrooms especially those with high DFW rates, launching free tutoring services, seeking auto-conferrals and timely graduation opportunities, and nudging via social media. Also, added significant resources to the IDEAS Center (Innovation, Diversity, Excellence, Access, Success) housed in the library to more effectively serve our diverse student body.
- Guided the Global Academic Initiative unit and the College of Business to further enhance the international executive MBA program in Asia. Added and strengthened teaching sites/partners and presided over graduation ceremonies held in Asia with improved experiences for graduates. Program annually enrolled several hundred students mostly supported by corporations.
- Created the Center for Research on Teaching and Learning Excellence (CRTLE) to engage faculty in research-based practices that innovate and enhance their teaching, resulting in clear and measurable advances in student learning. CRTLE also serves as a research hub to attract external grants to support fundamental and applied studies in the advancement of teaching and learning. Also, at the onset of the pandemic in early 2020, CRTLE led the efforts to upskill faculty and teaching assistants with state-of-the-art pedagogy of online teaching and conducted over 1500 individual and group training sessions.
- Partnered with deans, CFO and President to design a new incentive-based budget model (*responsibility centered management*) for colleges/school, which is expected to drive quality and growth (*access and excellence*), inspire innovation and entrepreneurial strategies, and yield more transparency, shared governance and operational efficiency. As part of the effort, the dean's metrics were created to enable and simplify tracking of college/school performances (*financial, enrollment, research, philanthropy*).
- Collaborated with the Vice President for Research to setup the Health Sciences Quad with the construction of a new Science and Engineering Innovation and Research building to foster interdisciplinary health-related research and teaching activities in support of University Strategic Plan 2025 emphasizing the *Health and Human Conditions* as one of the key research themes.

## UNIVERSITY OF CINCINNATI (2005–2017)

### **Dean, College of Engineering and Applied Science (2012–2017)**

Served as the 19<sup>th</sup> dean of the College (*birthplace of cooperative education*) with enrollments of about 6000 students (*1300 graduate and 4700 undergraduate students including most Honors students on campus and 500 undergraduates in the Joint Engineering Co-op Institute in Asia*), 160 faculty members, 110 staff members, 6 departments, 16 academic programs, USD\$80million/year operating budget, USD\$25million/year research funding and USD\$62million endowment in 2017. Managed 13 direct reports (*6 department heads, 3 associate deans, 4 directors*), and the UC Simulation Center as the founding director with USD\$2.3million/year funding and 75 research students. University of Cincinnati is designated as a Research-1: Highest Research Activity by the Carnegie Classification.

#### **Accomplishments (Dean):**

- Tripled first-year scholarships, achieved substantial curriculum enhancement, led expansion of College enrollment by 30% while increasing admission standards, attained record quality (*academic preparedness*) of incoming freshmen class the last 3 consecutive years of my deanship, and significantly increased percentage of incoming female undergraduate students from 16% to 20%.
- Substantially enhanced global engagement and international footprint: (1) created the Joint Engineering Co-op Institute (JCI) in partnership with Chongqing University. Enrolled 500 students as of 2017 (*and growing*) in this first mandatory co-op program in Asia generating over \$3million/year in new tuition revenue for UC – in honor of this success, UC established a permanent scholarship award (\$1,000 each award) called the Dean Teik Lim Outstanding Scholarship for a deserving JCI senior student during his/her study in Cincinnati; (2) developed a signature dual master's degree program with institutions in Europe and Asia to educate a global workforce; (3) doubled number of engineering students studying abroad; and (4) formed a novel partnership with the Future University in Egypt (FUE) to support and enhance the curriculum and faculty development in Engineering at FUE.
- Significantly improved the finances of the College through increase in enrollment (+30%), research funding (+20%) and philanthropy (+50%) during the last 3 years of my deanship. In 2012, at the onset of my deanship, the College had a performance-based budget deficit of about USD\$2million. During the last 4 consecutive fiscal years of my term as dean (2013–2017), the College completed each year with a surplus of USD\$2million over the previous fiscal year.
- Led the expansion of the highly successful College's Emerging Ethnic Engineering (E3) program geared towards minority student success into a multi-college summer bridge program for incoming STEM students. Freshmen retention rate is more than 90%, and more than 50% of freshmen are on Dean's list (GPA>3.5) and 75% have GPA>3.0.
- Initiated faculty hiring campaign (*50 in 5 plan – hiring at least 50 new faculty in 5 years*) fueled by growth, which resulted in 44 new faculty hired over 3 academic years (2014-2017) with over 40% female and/or minority faculty, and almost all new faculty hires have affiliation with multiple disciplines. Also, through cross-discipline faculty hiring, jumpstarted 2 key research clusters in *data analytics* and *water*.
- Collaborated with P&G to expand and enhance UC Simulation Center (established in 2008) – became the largest interdisciplinary university-industry research center on campus housing 75 research students from 5 different colleges; received P&G Connect+Develop private/public partnership award; replicated by P&G and Honda at various sites in North America, Europe and Asia; and produced a ten-fold return of investment for P&G.
- Secured a multi-million dollar in-kind and cash gift (cash is \$1million) to setup the Siemens PLM Simulation Technology Center in the Department of Mechanical Engineering.

- Initiated programmatic and curriculum reform. Select examples – infused innovation & entrepreneurship at the undergraduate level, enriched freshmen curriculum, and rebranded biomedical engineering as an interdisciplinary unit through alliances with College of Medicine and Cincinnati Children’s Hospital.
- Played a key role in establishing the University of Cincinnati Research Institute (UCRI) in partnership with GE Aviation (*founding corporate partner*) as a backbone enterprise to support industry projects.

### **Associate Dean for Graduate Studies & Research (2011–2012)**

Reported directly to the Dean of Engineering and Applied Science, and served on the university graduate council and graduate leadership group. Managed graduate studies and research operations and resources of the College (*research initiatives/incentives, and graduate enrollment, assistantships and fellowships*).

#### **Accomplishments (Associate Dean):**

- Led the development of the Master of Engineering program (*1-year professional master’s degree*) with capstone project or industrial internship. This degree program now serves as the backbone of the signature dual master’s collaboration with international partners in Europe and Asia.
- Developed a college-wide graduate recruiting and scholarships plan to offer more competitive graduate assistantship and fellowship awards.
- Collaborated with Vice President of Research and other research deans to develop a comprehensive campus-wide research plan focusing on 5 key research foci: *health, sensing, data analytics, environment, and manufacturing*. This effort formed part of the Third Century research initiative and also numerous cluster faculty hires.

### **Department Head, Mechanical Engineering (2005–2012)**

*Note: From 2010–2012, Department was renamed to the School of Dynamic System and I assumed the title of School Director with identical function and responsibility as Department Head.*

Led the largest department/school in the College with an enrollment of about 800 undergraduate and 300 graduate students, 36 faculty and 10 staff members, \$6million/year research funding and 5 research centers in academic year 2011-12. The Department offers B.Sc., M.Sc.(thesis), M.Eng. & Ph.D. degrees.

#### **Accomplishments (Department Head):**

- Led the surge in research funding from USD\$1million in 2005 to USD\$6million in 2011.
- Worked with the faculty to expand the number of research centers from 2 to 5 over a duration of 3 initial years of my term as department head.
- Created the UC Simulation Center in partnership with P&G in 2008, which later expanded into the largest interdisciplinary university-industry research center on campus.
- Led curriculum reform to modernize ME degree program, and to enhance efficiency, productivity and relevance to industry. Part of the reformation was an introduction of a degree-long project experience to augment the mandatory cooperative education to better prepare students for industry positions.
- Established the 2+3 co-op based B.Sc.ME program with Shanghai Jiaotong University. Students spend first 2 years at SJTU and last 3 years at UC with industry-sponsored cooperative experience.
- Doubled number of undergraduate freshmen while increasing admission standards over time.
- Transformed the external advisory board into a highly collaborative group by recruiting more corporate executives and senior staff into the membership. This new focus fueled the surge in industry-funded research, and also increased the quality and quantity of undergraduate students.



## PUBLICATIONS AND SCHOLARLY ACTIVITIES (FULL LISTING)

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### **Book Chapter & Special Issue of Journal Edited**

1. H.B. Huang, W.P. Ding, M.L. Yang, T.C. Lim, X.R. Huang, “Deep Belief Networks and Its Applications in Evaluation of Vehicle Interior Noise,” Advances in Signal Processing: Reviews, Book Series, Vol. 1, edited by S.Y. Yurish, International Frequency Sensor Association Publishing, pp. 331–367, 2018.
2. Co-guest editors: T.C. Lim, S. Theodossiades, P. Velex, “Power Transmission with Gears,” Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, **230**(7-8), pp. 1021–1368 (24 Refereed articles), Institution of Mechanical Engineers, United Kingdom, 2016, doi:10.1177/0954406216645042.
3. Co-guest editors: D. Donner and T.C. Lim, “Design of Direct Contact Mechanisms,” Journal of Mechanical Design, **129**(1), pp. 1–133 (15 refereed articles), American Society of Mechanical Engineers, New York, 2007, doi:10.1115/1.2363415.
4. Y. Wang and T.C. Lim, “An Experimental and Computational Study of the Dynamic Characteristics of Spot-welded Sheet Metal Structures,” Spot Welding and Weld Joint Failure Processes, edited by Y.L. Lee and J. Pan, SP-1621, SAE International, Warrendale, Pennsylvania, pp. 85–93, 2001.
5. Co-guest editors: R. Singh, A. Selamet and T.C. Lim, “Special Issue on Computational Methods in Noise and Vibration Control,” Noise Control Engineering Journal, **46**(3), pp. 77–136 (7 refereed articles), Institute of Noise Control Engineering, Saddle River, New Jersey, 1998.

### **Refereed Journal Papers**

1. G. Long and T.C. Lim, “A New Robust Delayless Subband Adaptive Filtering Algorithm with Variable Step Sizes for Active Control of Broadband Noise,” Applied Acoustics, **176**(2021), pp. 1-11, 2021, doi: 10.1016/j.apacoust.2020.107858.
2. T. Duan, J. Wei, A. Zhang, Z. Xu, T.C. Lim, “Transmission Error Investigation of Gearbox Using Rigid-flexible Coupling Dynamic Model: Theoretical Analysis and Experiments,” Mechanism and Machine Theory, **157**, pp. 1-15, 2020, doi: 10.1016/j.mechmachtheory.2020.104213.
3. C. Zhang, J. Wei, F. Wang, S. Hou, A. Zhang, T.C. Lim, “Dynamic Model and Load Sharing Performance of Planetary Gear System with Journal Bearing,” Mechanism and Machine Theory, **151**, pp. 1-22, 2020, doi: 10.1016/j.mechmachtheory.2020.103898.
4. W. Bai, G. Bao, D. Qin, Y. Wang, T.C. Lim, “Dynamic Characteristic of Motor-Gear System with Rotor and Gear Faults,” Journal of Computational and Nonlinear Dynamics, **15**(11), 2020, doi: 10.1115/1.4048196.
5. P. Wang, J. Wang, T.C. Lim, L. Lu, L. Pan, “A Strategy for Decoupling of Nonlinear Systems Using the Inverse Sub-structuring Method and the Parametric Model Identification Technique,” Mechanical Systems and Signal Processing, **140**, pp. 1-17, 2020, doi: 10.1016/j.ymssp.2020.106695.
6. J. Wei, A. Zhang, L. Shi, D. Qin, T.C. Lim, “Modeling and Dynamic Characteristics of Planetary Gear Transmission in Non-Inertial System of Aerospace Environment,” ASME Journal of Mechanical Design, **142**(3), pp. 031103(1–12), 2020, doi: 10.1115/1.4045354.
7. W. Zhang, X. Guo, Y. Wang, Y. Wen, C-C. Lin, T.C. Lim, “A CNC Tooth Grinding Method for Formate Face Hobbed Hypoid Gears,” Mechanism and Machine Theory, **144**, pp. 1–18, 2020, doi: 10.1016/j.mechmachtheory.2019.103628.

8. Z. Shi and T.C. Lim, "Effect of Shaft Misalignment on Hypoid Gear Pair Driven Through a Universal Joint," International Journal of Automotive Technology, **21**(2), pp. 371–383, 2020, doi: 10.1007/s12239-020-0035-6.
9. Z. Shi and T.C. Lim, "Modeling of Impact Damping Effect on Hypoid Gear Dynamic Response," Journal of Vibration and Acoustics, **141**(6), pp. 061016(1-14), 2019, doi: 10.1115/1.4044658.
10. A. Zhang, J. Wei, L. Shi, D. Qin, T.C. Lim, "Modeling and Dynamic Response of Parallel Shaft Gear Transmission in Non-Inertial System," Nonlinear Dynamics, **98**(2), pp. 997–1017, 2019, doi: 10.1007/s11071-019-05241-w.
11. G. Qiao, G. Liu, S. Ma, Y. Wang, P. Li, T.C. Lim, "Thermal Characteristics Analysis and Experimental Study of the Planetary Roller Screw Mechanism," Applied Thermal Engineering, **149**, pp. 1345–1358, 2019, doi: 10.1016/j.applthermaleng.2018.12.137.
12. S. Hou, J. Wei, A. Zhang, T.C. Lim, C. Zhang, "Study of Dynamic Model of Helical/Herringbone Planetary Gear System with Friction Excitation," Journal of Computational and Nonlinear Dynamics, **13**(12), 2018, doi: 10.1115/1.4041774.
13. J. Wei, A. Zhang, G. Wang, D. Qin, T.C. Lim, Y. Wang, T-J. Lin, "A Study of Nonlinear Excitation Modeling of Helical Gears with Modification: Theoretical Analysis and Experiments," Mechanism and Machine Theory, **128**, pp. 314–355, 2018, doi: 10.1016/j.mechmachtheory.2018.06.005.
14. A. Zhang, J. Wei, D. Qin, S. Hou, T.C. Lim, "Coupled Dynamic Characteristics of Wind Turbine Gearbox Driven by Ring Gear Considering Gravity," Journal of Dynamic, Measurement, and Control, **140**(9), pp. 091009(1–15), 2018, doi: 10.1115/1.4039482.
15. J. Wei, P. Bai, D. Qin, T.C. Lim, P. Yang, H. Zhang, "Study on Vibration Characteristics of Fan Shaft of Geared Turbofan Engine with Sudden Imbalance Caused by Blade Off," Journal of Vibration and Acoustics, **140**(4), pp. 041010(1–14), 2018, doi: 10.1115/1.4039246.
16. W. Bai, D. Qin, Y. Wang, T.C. Lim, "Dynamic Characteristics of Electromechanical Coupling Effects in Motor-Gear System," Journal of Sound and Vibration, **423**, pp. 50–64, 2018, doi: 10.1016/j.jsv.2018.02.033.
17. X. Fu, G. Liu, R. Tong, S. Ma, T.C. Lim, "A Nonlinear Six Degrees of Freedom Dynamic Model of Planetary Roller Screw Mechanism," Mechanism and Machine Theory, **119**, pp. 22–36, 2018, doi: 10.1016/j.mechmachtheory.2017.08.014.
18. R. Shu, J. Wei, D. Qin, T.C. Lim, A. Zhang, "Global Sensitivity Analysis and Dynamic Optimization of Multi-motor Driving Transmission System," Structural and Multidisciplinary Optimization, **58**(2), pp. 797–816, 2018, doi: 10.1007/s00158-018-1909-3.
19. G. Qiao, G. Liu, S. Ma, Z. Shi, Y. Wang, T.C. Lim, "An Improved Thermal Estimation Model of the Inverted Planetary Roller Screw Mechanism," Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2018, doi: 10.1177/0954406218762961.
20. T-Y. Meng, M-Y. Li, J. Wang, T.C. Lim, W-X. Kuang, "A Practical Estimation of Frequency Response Functions for System Decoupling Indirectly Using a Variable Cross-section Rod," ASME Journal of Vibration and Acoustics, **140**(5), pp. 051019(1–11), 2018, doi: 10.1115/1.4039868.
21. G. Qiao, G. Liu, Z. Shi, Y. Wang, S. Ma, T.C. Lim, "A Review of Electromechanical Actuators for More/All Electric Aircraft Systems," Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, **232**(22), pp. 4128–4151, 2018, doi:10.1177/0954406217749869.

22. W. Bai, D. Qin, Y. Wang, T.C. Lim, "Dynamic Characteristics of Motor-Gear System Under Load Saltations and Voltage Transients," Mechanical Systems and Signal Processing, **100**, pp. 1–16, 2018, doi: 10.1016/j.ymssp.2017.07.039.
23. X. Li, B. Chen, Y. Wang, T.C. Lim, "Mesh Stiffness Calculation of Cycloid-pin Gear Pair with Tooth Profile Modification and Eccentricity Error," Journal of Central South University, **25**(7), pp. 1717–1731, 2018, doi: 10.1007/s11771-018-3863-z.
24. X. Fu, G. Liu, S. Ma, R. Tong, T.C. Lim, "Kinematics Model of Planetary Roller Screw Mechanism with Run-out and Position Errors," ASME Journal of Mechanical Design, **140**(3), pp. 032301(1–10), 2018, doi: 10.1115/1.4039005.
25. G. Qiao, G. Liu, Z. Shi, Y. Wang, S. Ma, T.C. Lim, "Effect of Friction Torque on Electromechanical Brake System Dynamics," SAE Int. J. Veh. Dyn., Stab., and NVH, **1**(2), pp. 471–479, 2017, doi: 10.4271/2017-01-1902.
26. T. Feng, G. Sun, M. Li, T.C. Lim, "Channel Self-adjusting Filtered-x LMS Algorithm for Active Control of Vehicle Road Noise," International Journal of Vehicle Noise and Vibration, **13**(3/4), 2017, doi: 10.1504/IJNVN.2017.10010570.
27. T-Y. Meng, J. Wang, G-Y. Pu, L-X Lu, Z-W. Wang, T.C. Lim, "Inverse Sub-structuring Method for Multi-coordinate Rigidly Coupled Product Transport System based on a Novel Shearing Probe Technique," Packaging Technology and Science, **30**(9), pp. 601–618, 2017, doi: 10.1002/pts.2305.
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86. A.J. Witer, T.C. Lim, "Crank Rumble Noise Phenomenon: Experimental Characterization of Source Strength and Path Response," *Proceedings of the SAE Noise and Vibration Conference and Exposition*, Traverse City, Michigan, Paper No. 1999-01-1770, pp. 915–926, 1999.

87. R.C. Glover III, A. Sereshteh, T.C. Lim, "Application of Specialized FEA Dynamic Modeling Techniques for Noise Reduction of Superchargers," *Proceedings of the SAE Noise and Vibration Conference and Exposition*, Traverse City, Michigan, Paper No. 1999-01-1718, pp. 525–530, 1999.
88. Y. Cheng, T.C. Lim, "Dynamic Analysis of High Speed Hypoid Gears With Emphasis on Automotive Axle Noise Problem," *Proceedings of the ASME International Power Transmission and Gearing Conference*, DETC98/PTG-5784, Atlanta, Georgia, 1998.
89. T.C. Lim, D.R. Houser, "Dynamic Analysis of Layshaft Gears in Automotive Transmission," *Proceedings of the SAE Noise and Vibration Conference and Exposition*, Traverse City, Michigan, Paper No. 971964, pp. 739–749, 1997.
90. M.G. Donley, T.C. Lim, "Automotive Applications for Test/analysis Correlation," *Proceedings of the SAE Noise and Vibration Conference and Exposition*, Traverse City, Michigan, Paper No. 951366, pp. 1079–1085, 1995.
91. G.C. Steyer, T.C. Lim, "Practical Considerations of Vehicle Noise and Vibration Simulation Using an Improved Dynamic Impedance Method," *Proceedings of the SAE Noise and Vibration Conference and Exposition*, Traverse City, Michigan, Paper No. 931313, pp. 397–401, 1993.
92. T. Matsui, K. Suzuki, K. Mori, G.C. Steyer, T.C. Lim, "An Improved Dynamic Impedance Method for Dynamic Analysis of a Vehicle," *Proceedings of the JSAE Convention*, Kyoto, Japan, 1992.
93. T.C. Lim, G.C. Steyer, "Hybrid Experimental-analytical Simulation of Structure-borne Noise and Vibration Problems in Automotive Systems," *Proceedings of the SAE International Congress and Exposition*, Detroit, Michigan, Paper No. 920408, 1992.
94. M.G. Donley, T.C. Lim, G.C. Steyer, "Dynamic Analysis of Automotive Gearing Systems," *Proceedings of the Transmission and Driveline Symposium: Components, Gears, and CAE*, SAE International Congress and Exposition, Detroit, Michigan, Paper No. 920762, pp. 77–87, 1992.

### **Conference Papers**

1. A. Purgason and T.C. Lim, "Special Tactics, Increased Rates: SWAT (Success with Academic Timeliness)," APLU Annual Meeting, Lightning Round, 2020.
2. G. Long and T.C. Lim, "An Enhanced Delayless Non-uniform Subband Adaptive Algorithm for Broadband Noise Cancellation," *Proceedings of the National Conference on Noise Control Engineering*, San Diego, 2019 (received Michiko So Finegold Travel Award).
3. G. Long, T. Feng, R.A. Dhakad, T.C. Lim, "Multi-channel Adaptive Feedforward Systems for Multi-input Multi-output Active Control of Broadband Road Noise," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Chicago, 2018 (awarded Young Professional Grant).
4. R.A. Dhakad, G. Long, T. Feng, T.C. Lim, "Reference Weighted Filtered-x LMS Algorithm for Active Control of Impulsive Noise," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Chicago, 2018.
5. S. Gopalakrishnan, Y. Wang, T.C. Lim, "Interaction of Gear Tooth Friction and Misalignment Effect on the Vibro-acoustics of Spiral Bevel Gears," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Chicago, 2018 (received Michiko So Finegold Travel Award).
6. S. Gopalakrishnan, Y. Wang, T.C. Lim, "Effect of Gear Tooth Friction on the Vibro-Acoustics of Hypoid Gears," *Proceedings of the National Conference on Noise Control Engineering*, Grand Rapids, Michigan, 2017.

7. T. Feng, G. Sun, M. Li, T.C. Lim, "Improved MIMO Active Noise Control System with Integrated Adaptive Algorithms for Vehicle Powertrain Noise," *Proceedings of the National Conference on Noise Control Engineering*, Providence, Rhode Island, 2016 (received Michiko So Finegold Travel Award).
8. Y. Wang, D. Guo, S. Gopalakrishnan, T.C. Lim, "Vibration and Sound Radiation Analysis of Vehicle Axle Systems Using an Integrated Approach," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, San Francisco, 2015 (received the Hallberg Foundation Award).
9. G. Sun, M. Li, T.C. Lim, J. Osterhage, E.M. Fugate, J-H. Lee, "In-situ Adaptive Speech Enhancement Using Directional Microphone Applied to Magnetic Resonance Imaging," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, San Francisco, 2015 (awarded I-INCE Young Professional Grant).
10. T. Feng, G. Sun, J. Xu, M. Li, T.C. Lim, "Frequency Domain Inverse Model LMS Algorithm for Active Sound Tuning System of Powertrain Noise," *Proceedings of the 22<sup>nd</sup> International Congress on Sound and Vibration*, Florence, Italy, 2015.
11. G. Sun, T. Feng, M. Li, J. Xu, T.C. Lim, "Active Control of Vehicle Powertrain Noise Using Inverse Model LMS Algorithm," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Melbourne, 2014.
12. G. Sun, T. Feng, M. Li, J. Yang, T.C. Lim, "Stability Bound of FXLMS Algorithm for Repetitive Impact Noise with Different Durations," *Proceedings of the National Conference on Noise Control Engineering*, Fort Lauderdale, Florida, 2014 (received Michiko So Finegold Travel Award).
13. T. Feng, G. Sun, M. Li, J. Yang, T.C. Lim, "Fast Active Noise Equalizer Based on Inverse Model LMS Algorithm," *Proceedings of the National Conference on Noise Control Engineering*, Fort Lauderdale, Florida, 2014 (received the Hallberg Foundation Award).
14. Y. Wang, J. Yang, D Guo, G. Sun, T.C. Lim, "A System Approach for Vibro-Acoustic Analysis of Right-angle Gearbox," *Proceedings of the National Conference on Noise Control Engineering*, Fort Lauderdale, Florida, 2014 (received Michiko So Finegold Travel Award).
15. G. Sun, T. Feng, M. Li, T.C. Lim, "Convergence Analysis of FXLMS Algorithm for Active Control of Repetitive Impact Noise," *Proceedings of the 166<sup>th</sup> Meeting of the Acoustical Society of America*, Invited Paper, Special Session on Active Control of Sound and Vibration, San Francisco, 2013.
16. M. Li, T.C. Lim, J. Duan, "Active Control of Sinusoidal Disturbances Using Inverse Model LMS Algorithm," *Proceedings of the National Conference on Noise Control Engineering*, Denver, Colorado, 2013.
17. G. Pietila, T.C. Lim, "Identifying Varying Preferences in a Paired Comparison Jury Study using Unsupervised Clustering Techniques," *Proceedings of the National Conference on Noise Control Engineering*, Denver, Colorado, 2013 (won student paper competition award).
18. G. Sun, M. Li, T.C. Lim, "Experimental Study on the Convergence Behavior of Modified FXLMS Algorithm for Active Impact Noise Control," *Proceedings of the National Conference on Noise Control Engineering*, Denver, Colorado, 2013.
19. G. Sun, M. Li, T.C. Lim, "Modified Filtered-x LMS Algorithm for Active Control of Vehicle Road Impact Noise," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, New York, 2012 (won student paper competition award).
20. M. Li, J. Duan, T.C. Lim, "Enhanced Inverse Model LMS Algorithm for Active Control of Harmonic Response Clusters," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, New York, 2012.

21. W. Elwali, M. Li, T.C. Lim, "Numerical Analysis of Active Vibro-Acoustic Control in an Enclosed Cavity," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, New York, 2012 (won student paper competition award).
22. T.C. Lim, "Spectral-based, Multi-element Substructuring Analysis for Driveline and Vehicle NVH Applications," *International Conference on Vehicle Noise, Vibration and Safety Technology*, Invited Plenary Presentation, Chongqing, China, 2011.
23. T.C. Lim, "Advancement of Simulation Models for Geared Rotor System Dynamics," *International Conference on Power Transmissions*, Invited Keynote Presentation, Xian, China, 2011.
24. G. Sun, T.C. Lim, "Active Transfer Path Control of Substructure System with Weak Nonlinear Coupling," *Proceedings of the National Conference on Noise Control Engineering*, Portland, Oregon, 2011.
25. W. Elwali, M. Li, T.C. Lim, "Effect of Beam Boundary Condition on Sound Radiation inside a Planar Acoustic Cavity," *Proceedings of the National Conference on Noise Control Engineering*, Portland, Oregon, 2011 (won student paper competition award).
26. M. Li, B.W. Rudd, T.C. Lim, J-H Lee, "Active Noise Control of Magnetic Resonance Imaging Scanner Using Inverse Modeling Technique," *Proceedings of the National Conference on Noise Control Engineering*, Baltimore, Maryland, 2010.
27. W. Jiang, T.C. Lim, "Two-substructure, Time-Domain Transfer Path Analysis of Transient Dynamic Response of Mechanical Systems with Nonlinear Coupling," *Proceedings of the National Conference on Noise Control Engineering*, Baltimore, Maryland, 2010 (won student paper competition award).
28. J. Duan, T.C. Lim, "A Novel Delayless Frequency Domain Filtered-x Least Mean Square Algorithm for Vehicle Powertrain Noise Control," *Proceedings of the National Conference on Noise Control Engineering*, Baltimore, Maryland, 2010 (won student paper competition award).
29. B.W. Rudd, M. Li, T.C. Lim, J-H Lee, "Feedforward Active Noise Cancellation for MRI Utilizing Reference Microphone," *Proceedings of the International Symposium on Active Control of Sound and Vibration*, Paper 968, Ottawa, Canada, 2009.
30. M. Li, B. Rudd, T.C. Lim, J-H. Lee, "Active Noise Control of a High-field Magnetic Resonance Imaging Scanner," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Shanghai, China, 2008.
31. T. Peng, T.C. Lim, "Coupled Multi-body Dynamics and Vibration Simulation of Hypoid Geared Rotor Systems," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Shanghai, China, 2008.
32. M. Li, B. Rudd, T.C. Lim, J-H. Lee, "Simulated Study of Active Acoustic Noise Control of a Magnetic Resonance Imaging Scanner Response," *Proceedings of the National Conference on Noise Control Engineering*, Dearborn, Michigan, 2008.
33. B.W. Rudd, T.C. Lim, J-H. Lee, "Evaluation of MRI Compatible Headphones for Active Noise Cancellation," *Proceedings of the National Conference on Noise Control Engineering*, Dearborn, Michigan, 2008 (won student paper competition award).
34. E. Sorosiak, M. Li, T.C. Lim, T. Abe, M-R. Lee, M-T. Cheng, W. Vanhaaften, "A Fast Numerical Model for Vehicle Interior Acoustics," *Proceedings of the National Conference on Noise Control Engineering*, Dearborn, Michigan, 2008.
35. M. Li, E. Sorosiak, T.C. Lim, J. Duan, T. Abe, M-R. Lee, M-T. Cheng, W. Vanhaaften, "An Active Noise Control System for Tuning Vehicle Interior Response," *Proceedings of the National Conference on Noise Control Engineering*, Dearborn, Michigan, 2008.

36. T.C. Lim, "Spectral-based Multi-coordinate Substructuring Model for Vehicle NVH Refinement," Invited Paper, *Proceedings of the 4<sup>th</sup> Joint Meeting of the Acoustical Society of America and the Acoustical Society of Japan*, Honolulu, Hawaii, 2006.
37. T.C. Lim, "Tuning Out-of-phase Gear Pair Torsion Mode to Reduce Gear Whine," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Honolulu, Hawaii, 2006.
38. V. Kulkarni, T.C. Lim, "Dynamic Analysis of High Speed Rail-Vehicle Collisions," *Proceedings of the 24<sup>th</sup> International Modal Analysis Conference*, St. Louis, Missouri, 2006.
39. T.C. Lim, "Nonlinear Tooth Impacts in Hypoid Transmissions," *Proceedings of the 23<sup>rd</sup> International Modal Analysis Conference*, Orlando, Florida, 2005.
40. V. Palan, W.S. Shepard Jr., T.C. Lim, "Noise Control Techniques for a Reciprocating Fuel Cell Air Compressor," *Proceedings of the 22nd Southeastern Conference on Theoretical and Applied Mechanics (SECTAM XXII)*, Tuskegee, Alabama, 2004.
41. M. Li, T.C. Lim, Y.H. Guan, W.S. Shepard Jr., "Active Shaft Transverse Vibration Control for Suppressing Gear Mesh Response," *Proceedings of the International Symposium on Active Control of Sound and Vibration*, Paper a04\_001, Williamsburg, Virginia, 2004.
42. L. Liu, T.C. Lim, "Effect of Structural Coupling Formulation on FRF-based Inverse Sub-structuring Predictions," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Dearborn, Michigan, 2002.
43. R.P. Tanna, T.C. Lim, "Natural Mode Sensitivity of Automotive Transmission Ring Gear Structure," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Dearborn, Michigan, 2002.
44. P.H. Mathuria, T.C. Lim, "Effect of Tail Pipe Position on Vehicle Interior Noise," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Dearborn, Michigan, 2002.
45. Y. Cheng, T.C. Lim, "An Analysis of Rear Axle Gear Whine," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Dearborn, Michigan, 2002.
46. Y. Dai, T.C. Lim, C. Karr, "Neural Network Simulation of Subjective Response to Brake Squeal Noise," *Proceedings of the Sound Quality Symposium*, Dearborn, Michigan, 2002.
47. X. Jiang, H. Wang, T.C. Lim, "Nonlinear Time-varying Vibrations of Hypoid Gear Pair Systems," *Proceedings of the 9<sup>th</sup> International Congress on Sound and Vibration*, Orlando, Florida, 2002.
48. P.H. Mathuria, R.P. Tanna, T.C. Lim, "Determining Modal Density of Ring Type Structures Applying Experimental and Finite Element Approaches," *Proceedings of the 9<sup>th</sup> International Congress on Sound and Vibration*, Orlando, Florida, 2002.
49. T.C. Lim, "Determination of the Frequency Response Functions (FRF) of Complex Systems using Spectral-based Inverse Sub-structuring Approach," *Proceedings of the 141<sup>st</sup> Meeting of the Acoustical Society of America*, Chicago, Illinois, 2001.
50. T.C. Lim, "A Combined Experimental/FEM Model for Predicting Vehicle Panel Acoustic Noise Contribution," *Proceedings of the 139th Meeting of the Acoustical Society of America*, Atlanta, Georgia, 2000.
51. J. Zhen, T.C. Lim, J. Juan, J. Van Loon, S.P. Cheng, D. Soine, P. Gu, J. Park, "Chassis Force Transmissibility (CFT) Method," *Ford 2000 NVH Conference*, Dearborn, Michigan, 2000.
52. T.C. Lim, R.D. Shadden, "On the Annoyance Factors of Power Window Regulator Sounds," *Proceedings of the Sound Quality Symposium*, Ypsilanti, Michigan, pp. 125–130, 1998.

53. A.L. Dunn, T.C. Lim, D.R. Houser, "A New Metric for Rating In-vehicle Gear Whine Levels," *Proceedings of the National Conference on Noise Control Engineering*, Ypsilanti, Michigan, pp. 461–466, 1998.
54. R.D. Shadden, T.C. Lim, "Influence of Modulated Complex Tones on Power Window Regulator Noise Quality," *Joint Proceedings of the National Conference on Noise Control Engineering and 133rd Meeting of the Acoustical Society of America*, State College, Pennsylvania, pp. 503–506, 1997.
55. A. Crewe, T.C. Lim, "Sound Quality Analysis of Vehicle Noise," *Proceedings of the JSME Design and Systems Conference*, Japan, 1995.
56. T.C. Lim, "Mid-frequency Range Vibro-acoustic Simulation Using Frequency Response Technique," *Proceedings of the International Congress and Exposition on Noise Control Engineering*, Newport Beach, California, pp. 1209–1212, 1995.
57. T.C. Lim, "Simulation of In-vehicle Structure-borne Noise Using Sound Intensity and Finite Element Model of Acoustic Cavity," *Proceedings of the 8<sup>th</sup> SDRC Technology Conference*, Milford, Ohio, 1994.
58. T.C. Lim, G.C. Steyer, "System Dynamics Simulation Based on Structural Modification Analysis Using Response Techniques," *Proceedings of the 10<sup>th</sup> International Modal Analysis Conference*, San Diego, California, pp. 1153–1158, 1992.
59. G. Steyer, T.C. Lim, "System Dynamics in Quiet Gear Design," *Proceedings of the 9<sup>th</sup> International Modal Analysis Conference*, pp. 999–1005, 1991.
60. T.C. Lim, G.C. Steyer, "Hybrid Experimental-analytical Simulation of Structure-borne Noise and Vibration Problems in Automotive Systems," *Proceedings of the 7<sup>th</sup> SDRC Technology Conference*, Milford, Ohio, 1991.
61. T.C. Lim, G.C. Steyer, "An Improved Numerical Procedure for the Coupling of Dynamic Components Using Frequency Response Functions," *Proceedings of the 9<sup>th</sup> International Modal Analysis Conference*, pp. 902–908, 1991.
62. J.F. Polk, T.C. Lim, G.C. Steyer, "Graduated Shock Testing on a Mobile Tactical System," *Proceedings of the 62<sup>nd</sup> Shock and Vibration Symposium*, Springfield, Virginia, pp. 293–299, 1991.
63. T.C. Lim, R. Singh, "Coupling Loss Factor of a Shaft-bearing-plate System," *Proceedings of the International Conference on Noise Control Engineering*, Gothenburg, Sweden, pp. 957–960, 1990.
64. T.C. Lim, G.C. Steyer, "An Improved Scheme for the Coupling of Structural Components Using Frequency Response Functions," *6th SDRC Technology Conference*, Milford, Ohio, 1990.
65. T.C. Lim, R. Singh, "Statistical Energy Analysis of a Geared Rotor System," *Proceedings of the National Conference on Noise Control Engineering*, Austin, Texas, pp. 65–70, 1990.
66. T.C. Lim, R. Singh, "Force and Moment Transmissibilities through Rolling Element Bearing in a Single-stage Rotor System," *Proceedings of the 8<sup>th</sup> International Modal Analysis Conference*, Kissimmee, Florida, pp. 704–710, 1990.
67. T.C. Lim, R. Singh, J.J. Zakrajsek, "Modal Analysis of Gear Housing and Mounts," *Proceedings of the 7<sup>th</sup> International Modal Analysis Conference*, Las Vegas, Nevada, pp. 1072–1078, 1989.
68. T.C. Lim, R. Singh, "Structure-borne Noise Transmission Through Rolling Element Bearings," *Proceedings of the International Conference on Noise Control Engineering*, Newport Beach, California, pp. 81–86, 1989.

### **Other Public Domain Publications**

1. P.H. Mathuria, T.C. Lim, W.S. Shepard Jr., S.R. Bell, M. Venturi, H.H. Dobbs and E. Kallio, "Vibration and Shock Considerations in the Design of a Truck-mounted Fuel Cell APU System," National Automotive Center, Technical Review, pp. 21–28, 2002.
2. G.C. Steyer, T.C. Lim, "System Simulation Methods for Solving Noise and Vibration Problems," *Sound and Vibration*, pp. 14–18, April 1993.
3. R. Singh, T.C. Lim, "Vibration Transmission Through Rolling Element Bearings in Geared Rotor Systems," NASA Contractor Report 4334 (AVSCOM Technical Report 90-C-019), 1990.
4. T.C. Lim, R. Singh, "A Review of Gear Housing Dynamics and Acoustics Literature," *NASA Contractor Report* 185148 (AVSCOM Technical Memorandum 89-C-009), 1989.

### **Invited Lectures and Seminars**

1. "Diversity in Leadership - Keynote," NAAAP LEADS Conference, 2020.
2. "State of Higher Education – Panel Discussion," Dallas Regional Chamber, 2020.
3. "Lessons from a Life Journey to America," goSMAC webinar series, 2020.
4. "Modeling, Analysis and Control of High-Speed Precision Gear Dynamics," ASME/NCAD Tutorial Session at the Inter-Noise 2015.
5. "UC Emerging Ethnic Engineering," *National Action Council for Minorities in Engineering (NACME) Annual Meeting*, keynote speaker, 2015.
6. "Modeling, Analysis and Control of High-Speed Gear Dynamics," *William Maxwell Reed Seminar*, University of Kentucky, 2014.
7. "Software Changing the Face of Manufacturing: Training the 21<sup>st</sup> Century Workforce," Member of 3-Panel discussion session as part of the Building the Future: Manufacturing's Software Revolution workshop sponsored by Siemens and The Atlantic, Siemens Motor Manufacturing Facility, Cincinnati, USA, 2014.
8. "Current and Future Themes in Modeling and Simulation," *NX CAE Symposium*, Opening Keynote Presentation, Cincinnati, Ohio, 2013.
9. "Modeling, Analysis and Simulation Capabilities in HGSim," LiuGong, Liuzhou, China, 2012.
10. "Spectral-based, Multi-element Substructuring Analysis for Driveline and Vehicle NVH Applications," International Conference on Vehicle Noise, Vibration and Safety Technology, Invited Plenary Presentation, Chongqing, China, 2011.
11. "Advancement of Simulation Models for Geared Rotor System Dynamics," International Conference on Power Transmissions, Invited Keynote Presentation, Xian, China, 2011.
12. "Gear Research," Chongqing Gearbox Company Ltd., Chongqing, China, 2011.
13. "Product Sound Quality Analysis and Design," Human Factors and Ergonomics Society, Tri-State Chapter Meeting, Cincinnati, Ohio, 2011.
14. "Modeling, Analysis and Control of High-speed Gear Dynamics," Keynote Speaker, 3<sup>rd</sup> Annual Romax User Conference, Troy, Michigan, 2009.
15. "A Decade of Research in the Gear Mesh and Dynamics Consortium," Chongqing University, Chongqing, China, 2009.

16. "Modeling, Analysis and Control of High-Speed Gear Dynamics," Michigan State University, East Lansing, Michigan, 2008.
17. "Cooperative Education at UC," Shanghai Jiao Tong University, Shanghai, China, 2008.
18. "Cooperative Education at UC," GE China Technology Center, Shanghai, China, 2008.
19. "Cooperative Education at UC," National Instruments, Shanghai, China, 2008.
20. "Automotive NVH," SAIC Motor Technical Center, Shanghai, China 2008.
21. "Chang Jiang lecture on Gear Dynamics," Chongqing University, Chongqing, China, 2008.
22. "Hypoid Gear Mesh and Dynamics," Komatsu, Tokyo, Japan, 2007.
23. "Active Vibrations and Noise Control (AVNC)," Copeland Sound and Vibration Workshop, Sidney, Ohio, 2007.
24. "Gear Dynamics and Gear Noise," Caterpillar Gear Forum, Peoria, Illinois, 2007.
25. "Modeling, Analysis and Control of High-speed Gear Dynamics," Hongkong Polytechnic University, 2006.
26. "Active Gearbox Vibration Control for Gear Whine Reduction," National Yunlin University of Science and Technology, Taiwan, 2006.
27. "Rear Axle Gear Whine Simulation," Ford Advanced Engineering Center, Dearborn, Michigan, 2005
28. "Introduction to Hypoid Gear Dynamics," Dana Torque-Traction Technologies, Maumee, Ohio, 2004.
29. "Active Vibration Control of a Gear Pair System," Gearlab Sponsors' Meeting, Ohio State University, Columbus, Ohio, 2004.
30. "Hypoid Gear Tooth Wear and Dynamics," Visteon Axle, Driveline and Systems Engineering, Michigan, 2003.
31. "Hypoid Gear Whine Analysis," Visteon Chassis Division, Dearborn, Michigan, 2003.
32. "Fuel Cell System Vibration Isolation and Noise Analysis," US Army TACOM, Warren, Michigan, 2002.
33. "Automotive Noise and Vibration Control," Manta Corporation, Cincinnati, Ohio, 2001.
34. "Active Noise and Vibration Control in High Power Density Gearboxes," NASA Glenn Research Center, Cleveland, Ohio, 2001.
35. "Structural Dynamics of Fuel Cell Auxiliary Power Unit," Xcellsis, Poway, California, 2001.
36. "Graduate School and Research Opportunities," ASME Student Meeting, Univ. of Alabama, Tuscaloosa, Alabama, 2001.
37. "Vibro-acoustics and Sound Quality Research," Mechanical Engineering Industrial Advisory Board Meeting, University of Alabama, Tuscaloosa, Alabama, 2001.
38. "Analysis of Damping Coefficients in Reciprocating Engine," MTS Noise and Vibration Division, Cincinnati, Ohio, 2000.
39. "Powertrain NVH and Sound Quality Research," Ford Research and Vehicle Technology, Dearborn, Michigan, 2000.
40. "Simulation of Active Gear Vibration Control," NASA Glenn Research Center, Cleveland, Ohio, 2000.



41. "Research in Active Control of High Power Density Gearboxes," Sikorsky Aircraft Corporation, Stratford, Connecticut, 2000.
42. "Vibration Coupling Modeling Applying Modal and Spectral-based Sub-structuring Approaches," Eaton Innovation Center, Southfield, Ohio, 2000.
43. "Power Window Noise Quality," Meritor Automotive, Gordonsville, Tennessee, 1999.
44. "Hybrid Finite Element & Experimental Modeling Techniques for Mid-frequency Noise Control Problems," General Motors Gear Center, Romulus, Michigan, 1999.
45. "Exhaust Noise Quality Analysis," General Motors Research and Development Center, Warren, Michigan, 1998.
46. "Crank Rumble Noise Quality," Honda of America Manufacturing, Anna, Ohio, 1998.
47. "Automotive NVH and Sound Quality Research," Mechanical and Aerospace Engineering, University of Missouri-Columbia, 1998.
48. "Automotive NVH and Sound Quality Research," Mechanical, Industrial and Manufacturing Engineering, University of Toledo, 1998.
49. "Automotive NVH and Sound Quality Research," Mechanical Engineering, Univ. of Memphis, 1998.
50. "Automotive NVH and Sound Quality Research," Mechanical Engineering, Univ. of Alabama, 1998.
51. "Automotive NVH and Sound Quality Research," Mechanical Engineering, Univ. of Michigan-Dearborn, 1998.
52. "Sound Quality Assessment and Diagnostic Techniques," Acoustical Society of America Local Chapter Meeting, Columbus, Ohio, 1997.
53. "Sound Quality Processing Techniques," Information Processing Systems Laboratory, Department of Electrical Engineering, Ohio State University, Columbus, Ohio, 1997.
54. "Hybrid Experimental-analytical Models for Structure-borne Noise and Vibration Problems" Mechanical Engineering Graduate Seminar, Ohio State University, Columbus, Ohio, 1997.
55. "Quantitative Methods to Determine Sound Quality of Power Window Regulator Systems," Chrysler Body Hardware Tech Club Meeting, Auburn Hills, Michigan, 1997.
56. "Finite Element Techniques for Analyzing Gear Vibration Problem," Eaton Corporate Research and Development, Southfield, Michigan, 1996, 1997 (2 separate talks).
57. "Fundamentals of Introductory Acoustics," Midwest Acoust-A-Fiber, Delaware, Ohio, 1997.
58. "Vehicle System Acoustics and Vibrations in the Mid-frequency Range," Mechanical Engineering, Catholic Univ. of America, 1997.
59. "Vehicle System Dynamics in the Mid-frequency Range," Engineering, Univ. of Denver, 1997.
60. "Modeling Issues Related to Analyses of Mid-frequency Range Vibro-acoustic Problems in Automotive Systems," Ford Advanced Engineering Center, Dearborn, Michigan, 1996.
61. "Sound Quality Analysis of Automotive Noise," Chrysler NVH Tech Club Meeting, Auburn Hills, Michigan, 1996.
62. "Identification of Vehicle Noise and Vibration Sources and Paths," JI Case, Hinsdale, Illinois, 1996.
63. "Advances in Automotive NVH," Honda Research and Development, Raymond, Ohio, 1996.
64. "Transmission Noise & Vibration," Honda of America Manufacturing, Anna, Ohio, 1996, 1997 (2 separate talks).

65. "Tire Structural Modeling and Analysis," Sime Darby, Kuala Lumpur, Malaysia, 1995.
66. "Exhaust Structure Vibration Modeling," Mazda Powertrain Engineering Department, Hiroshima, Japan, 1994.
67. "Vehicle NVH Technologies," Hyundai and Daewoo, South Korea, 1994 (2 separate talks).
68. "Fluid-structural Interaction and Acoustic Intensity," Isuzu Adv. Engineering Center, Japan, 1992.
69. "System Dynamics Modeling Applying the Response Technique," Estech, Yokohama, Japan, 1992.
70. "Vehicle Structure-borne Noise Analysis Applying Response Technique," Nissan Technical Center, Japan, 1991.
71. "Vibration Transmission Through Rolling Element Bearings," Structural Dynamics Research Corporation, Milford, Ohio, 1989.

### **Project Reports**

Authored or co-authored over 200 technical reports (since 1986) for federal and industry sponsors including National Science Foundation, Army Research Office, Federal Railroad Administration, Department of Transportation, Ford, General Motors, DaimlerChrysler, Mack Trucks, Volvo, Caterpillar, Honda, Nissan, Mazda, Isuzu, Hyundai, Daewoo, Samsung, Cooper Tire, Eaton, ArvinMeritor, Ballard Power Systems, Teledyn, Federal Mogul, Johnson Controls, Sikorsky, Dana, etc.

### **Simulation Software**

Developed several computational programs that have been employed in engineering practices, classroom teachings, and/or graduate research:

- Hypoid Gear Mesh and Dynamic Simulation Package (HGSim), 2002
- Spectral-based Sub-structuring Analysis Code (SSA), 2002
- Rolling Element Bearing Stiffness Matrix Calculation (REBM), 2000
- Structure-borne Noise Path Analysis Code (NPA), 1995
- Sound Quality Metrics Calculation Program (SQ), 1995
- System Modeling Applying the Response Technique (SMART), 1992
- Vibration through Rolling Element Bearing Code (VTB) for NASA/Army, 1989

### **Laboratories**

Developed four major clusters of research and graduate training laboratory infrastructures:

- University of Texas at Arlington – Vibro-acoustics and Sound Quality Research Laboratory (Computational Vibro-acoustics, Gear Dynamics and Acoustics), 2017–present.
- University of Cincinnati – Vibro-acoustics and Sound Quality Research Laboratory (Computational Vibro-acoustics, Gear Dynamics and Acoustics, Sound Quality Studio), 2002–2017.
- University of Alabama – Vibro-acoustics and Sound Quality Research Laboratory (Computational Vibro-acoustics, Gear Dynamics and Acoustics, Sound Quality Studio, Experimental Modal Analysis, Advanced Automotive Testing), 1998–2002.
- Ohio State University – Automotive NVH Research Laboratory (Hemi-anechoic Chamber, Sound Quality Studio, Modal Testing, Computational Vibro-acoustics), 1996–1998.

## **Research Centers**

Actively participated and played key roles in the development and advancement of several major university research centers and institutes. Set goals, drafted plans, built up laboratories, developed funded research programs and marketed technical capabilities.

- University of Cincinnati – Siemens PLM Simulation Technology Center, 2016–2017  
UC Simulation Center, (Director), 2008–2017  
(A UC Engineering and Proctor & Gamble Collaboration)  
PACE Global Design and Manufacturing Center, 2007–2017
- University of Alabama – Center for Advanced Vehicle Technologies, 1998–2002  
(Led Structures research thrust)  
Machine Process and Product Design Center, 1998–2002  
Alabama Institute of Manufacturing Excellence, 1998–2002
- Ohio State University – Center for Automotive Research, 1996–1998  
(Member of the Faculty Advisory Committee)

## **TEACHING AND STUDENT ADVISING**

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### **Courses Taught**

Vehicle Noise, Vibration and Harshness <sup>1</sup>	Dual Level (Graduate, Senior)
Concurrent Product and Process Development <sup>1</sup>	Dual Level (Graduate, Senior)
Analytical Vibrations of Mechanical Systems <sup>1</sup>	Graduate
Advanced Vibrations <sup>2,3</sup>	Graduate
Intermediate Dynamics <sup>1</sup>	Graduate
Advanced Dynamics <sup>1</sup>	Graduate
Advanced Dynamics of Machinery I <sup>2</sup>	Graduate
Advanced Dynamics of Machinery II <sup>2</sup>	Graduate
Sound Quality Analysis <sup>1</sup>	Graduate (special topic)
Gear dynamics <sup>1</sup>	Graduate (special topic)
Digital Signal Analysis of Mechanical Systems	Graduate
Mechanical Vibrations I	Junior (required)
Structures/motion Lab. – team teaching	Senior (required)
Mechanical Vibrations <sup>2,3</sup>	Senior (elective)
Dynamic Machine Components <sup>2</sup>	Senior (required)
Dynamic Systems <sup>3</sup>	Junior (required)
Signal Processing	Senior (special problem)
Engineering Graphics	Freshman (required)
Engineering Design	Freshman (required)
Fundamentals of Acoustics <sup>1</sup>	Industrial short course
Introduction to Hypoid Gear Dynamics <sup>1</sup>	Industrial short course
Active Vibrations and Noise Control <sup>1</sup>	Industrial short course
Gear Noise Short Course <sup>1</sup>	Industrial short course

<sup>1</sup> New course and/or syllabus developed

<sup>2</sup> Course contents significantly revamped

<sup>3</sup> New experimental sets were developed to augment lectures

### **Doctoral Dissertations Supervised**

1. [REDACTED], 2020, Hypoid Gear Noise and Vibration Control in Automotive Rear Axle Systems, University of Texas at Arlington.
2. [REDACTED], 2020, Subband Adaptive Filtering for Active Broadband Noise Control with Application to Road Noise Inside Vehicles, University of Cincinnati.
3. [REDACTED], 2019, Dynamic Modeling and Electromechanical Coupling Effect Analysis of the Motor-Gear System, Chongqing University (as co-supervisor).
4. [REDACTED], 2018, Tribodynamics of Right Angled Geared System, University of Cincinnati.
5. [REDACTED], Design and Analysis of Efficient Adaptive Algorithms for Active Control of Vehicle Interior Sound, University of Cincinnati.
6. [REDACTED], 2017, Vibration and Sound Radiation Analysis of Vehicle Powertrain Systems with Right-angle Geared Drive, University of Cincinnati.
7. [REDACTED], 2016, Nonlinear Time-varying Dynamic Modeling of Vehicle Driveline Systems with Emphasis on Hypoid Gear Excitation and Response, University of Cincinnati.
8. [REDACTED], 2013, Active Control of Impact Acoustic Noise, University of Cincinnati.
9. [REDACTED], 2013, Vehicle Vibro-Acoustic Response Computation and Control, University of Cincinnati.
10. [REDACTED], 2013, Intelligent Systems Approaches to Product Sound Quality Analysis, University of Cincinnati.
11. [REDACTED], 2012, Nonlinear Dynamics of Driveline Systems with Hypoid Gear Pair, University of Cincinnati.
12. [REDACTED], 2011, Active Control of Vehicle Powertrain and Road Noise, University of Cincinnati (awarded Martin Hirschorn IAC Prize).
13. [REDACTED], 2011, Transmission Characteristics of Crossed Beveloid Gears Used in Marine Gearbox with Small Shaft Angle, Chongqing University (as co-supervisor).
14. [REDACTED], 2010, Active Tonal and Broadband Noise Control for Magnetic Resonance Imaging Systems, University of Cincinnati (awarded Martin Hirschorn IAC Prize).
15. [REDACTED], 2010, Coupled Multi-body Dynamic and Vibration Analysis of Hypoid and Bevel Geared Rotor System, University of Cincinnati.
16. [REDACTED], 2010, Research on Multi-body Multi-DOF Nonlinear Dynamic of Helical Bevel Gear, Chongqing University (co-supervisor).
17. [REDACTED], 2008, A Hearing-based Frequency Domain Sound Quality Model for Combined Aerodynamic and Power Transmission Response with Application to Rotorcraft Interior Noise, University of Cincinnati.
18. [REDACTED], 2007, Nonlinear Time-varying Gear Mesh and Dynamic Analysis of Hypoid and Bevel Geared Rotor Systems, University of Cincinnati.
19. [REDACTED], 2005, Active Vibration Control of a Gearbox System with Emphasis on Gear Whine Reduction, University of Cincinnati.

20. [REDACTED], 2003, Active Vibration Control of a Gear Pair System, University of Alabama (as co-supervisor; also received College of Engineering Outstanding Research Award and Outstanding Dissertation Award).
21. [REDACTED], 2002, Modal And Spectral-based Hybrid Experimental-analytical Synthesis Technique for Analyzing Structural Dynamic Interactions, University of Alabama.
22. [REDACTED], 2002, Dynamic Characteristics of Ring-form Structures with Emphasis on Automotive Transmission Ring Gear Vibrations, University of Alabama.
23. [REDACTED], 2002, Structural Dynamic Optimization of Vehicle Brake Pad Design for Squeal Noise Reduction, University of Alabama.
24. [REDACTED], 2002, A Frequency Response Function-based Inverse Sub-structuring Approach for Analyzing Vehicle System NVH Response, University of Alabama.
25. [REDACTED], 2002, Gear Mesh Characteristics and Dynamics of Hypoid Geared Rotor System, University of Alabama.
26. [REDACTED], 2000, Development of a Spectral-based Sub-structuring Technique for Modeling Vibratory Response of Complex Vehicle Structures, University of Alabama (Received College of Engineering Outstanding Doctoral Dissertation Award).
27. [REDACTED], 2000, Dynamics of High-speed Hypoid and Bevel Geared Rotor Systems, Ohio State University.

#### **Master's Theses Supervised**

1. [REDACTED], 2017, Active Control of Impulsive Noise Using Reference Weighted FxLMS Algorithm, University of Cincinnati.
2. [REDACTED], 2015, Active Control of Vehicle Powertrain Noise Using Adaptive Notch Filter with Inverse Model LMS Algorithm, University of Cincinnati.
3. [REDACTED], 2013, Torque Load Effect on Multi-Point Mesh and Dynamics of Right-angle Geared Drives, University of Cincinnati.
4. [REDACTED], 2011, Transmission Loss Analysis of Laminated Glass with Porous Layers using Transfer Matrices for Automotive Applications, University of Cincinnati.
5. [REDACTED], 2011, Time-Frequency Feature Extraction for Impact Sound Quality Analysis with Emphasis on Automobile Applications, University of Cincinnati.
6. [REDACTED], 2010, Hypoid and Spiral Bevel Gear Dynamics with Emphasis on Gear-Shaft-Bearing Structural Analysis, University of Cincinnati.
7. [REDACTED], 2010, Spectral-based Substructure Transfer Path Analysis of Steady-state and Transient Vibrations, University of Cincinnati.
8. [REDACTED], 2009, Active Control of Vehicle Powertrain Noise Applying Frequency Domain Filtered-x LMS Algorithm, University of Cincinnati.
9. [REDACTED], 2008, Numerical Simulation and Active Noise Control of Vehicle Interior Acoustics, University of Cincinnati.
10. [REDACTED], 2006, Dynamic Characteristics of Shaft-Universal Joint System, University of Cincinnati.
11. [REDACTED], 2005, Wave Attenuation Behavior of Vibrations Transmitted Through Supports in Rotating Structures with Geometric and Material Periodicities, University of Cincinnati.

12. [REDACTED], 2004, Experimental Characterization and Active Control Simulation of the Acoustic Noise Response of a High-field, High Rate MRI Scanner, University of Cincinnati.
13. [REDACTED], 2004, An Elastic Contact Theory for Modeling Vibration Transmissibility through Rolling Element Bearings, University of Cincinnati.
14. [REDACTED], 2002, Rotorcraft Cabin Sound Quality Analysis, University of Alabama.
15. [REDACTED], 2002, Design and Vibro-acoustic Characterization of Gear Testing Machines for Active Vibration Control Studies, University of Alabama.
16. [REDACTED], 2002, Simulation Study on Active Vibration Control of Gear Whine Problem, University of Alabama.
17. [REDACTED], 2002, Nonlinear Torsional Dynamic Analysis of Hypoid Gear Pairs, University of Alabama.
18. [REDACTED], 2002, Analysis of Time-varying Rolling Element Bearing Characteristics, University of Alabama.
19. [REDACTED], 2000, Dynamic Characteristics of Welded Automotive Structures, University of Alabama (Received College of Engineering Outstanding M.Sc. Thesis Award).
20. [REDACTED], 1999, The Application of Enhanced Least Square and TSVD Approaches in FRF-based Substructuring Technique, Ohio State University.
21. [REDACTED], 1998, An Experimental and Statistical Analysis of Impulsive Sound Quality with Applications to Automotive Door Closing and Locking Processes, Ohio State University.
22. [REDACTED], 1997, Development of Quantitative Methods to Determine Sound Quality of Power Window Regulators, Ohio State University.

#### **Doctoral Dissertation Supervisory Committees Served**

1. [REDACTED], 2018, Foil Thrust Bearing with Pocket Grooves and Tailored Bump Stiffness Distribution for Improved Static Performance, University of Texas at Arlington.
2. [REDACTED], 2016, Modeling of Machine Life Using Accelerated Prognostics and Health Management (APHM) and Enhanced Deep Learning Methodology, University of Cincinnati.
3. [REDACTED], 2015, Enhanced Heat Transfer in Micro-scale Heat Exchangers Using Nano-particle Laden Electro-osmotic Flow (EOF), University of Cincinnati.
4. [REDACTED], 2015, Analysis and Control of Fan Noise Within a Converging Duct Section of Limited Length, Hong Kong Polytechnic University.
5. [REDACTED], 2014, Diagnosis of Coronary Artery Stenosis Using Combined Trans-Lesional Hemodynamics and Anatomical Information, University of Cincinnati.
6. [REDACTED], 2013, Prognostics and Health Assessment of a Multi-Regime System Using a Residual Clustering Health Monitoring Approach, University of Cincinnati.
7. [REDACTED], 2013, Development of Energy-Based Endpoints for Diagnosis of Pulmonary Valve Insufficiency, University of Cincinnati.
8. [REDACTED], 2010, Study on Human Auditory System Models and Risk Assessment of Noise Induced Hearing Loss, University of Cincinnati.
9. [REDACTED], 2009, Study on the Dynamics of Flexible Multibody of Wind Turbine, Chongqing University, China.

10. [REDACTED], 2007, Constrained Multi-body Dynamics Method to Study Musculoskeletal Disorders Due to Human Vibration, University of Cincinnati.
11. [REDACTED], 2006, Analysis of Vibration and Squeal Noise of a Brake Rotor Using a Simplified Model, The Hongkong Polytechnic University.
12. [REDACTED], 2006, Improved Diagnostics of Coronary Stenoses with Lesion Flow Coefficient using Guidewires, University of Cincinnati.
13. [REDACTED], 2003, Augmentation of Third-octave-band Sound Pressure Levels of an Electromechanical System by Sampled Harmonics, University of Alabama.
14. [REDACTED], 2000, Bearing Fault Detection in Variable Speed, University of Alabama.

#### **Master's Thesis Supervisory Committees Served**

1. [REDACTED], 2010, Assessment of an Actively-cooled Micro-channel Heat Sink Device, Using Electro-osmotic Flow, University of Cincinnati.
2. [REDACTED], 2010, Longitudinal Dynamic Modeling and Experimental Investigation of the Snowmobile with CVT, Chongqing University.
3. [REDACTED], 2009, Evaluation of Health Assessment Techniques for Rotating Machinery, University of Cincinnati.
4. [REDACTED], 2009, Using Group Transmissibility Concepts to Compare Dissimilar Vehicle Platforms, University of Cincinnati.
5. [REDACTED], 2009, Dispensing and Diagnostics of Nano-liter Samples in Microreactors Using Electroosmotic Flow, University of Cincinnati.
6. [REDACTED], 2008, A Structural Damage Identification Method Based on Unified Matrix Polynomial Approach and Subspace Analysis, University of Cincinnati.
7. [REDACTED], 2006, Bioparticle Separation in non-Newtonian Fluid using Pulsed Flow in Micro-Channels, University of Cincinnati.
8. [REDACTED], Development of a Prognosis Method for Journal Bearing Failure Centrifugal Air Compressor, University of Cincinnati.
9. [REDACTED], 2005, A Study of Modal Testing Measurement Errors, Sensor Placement and Modal Complexity on the Process of FE Correlation, University of Cincinnati.
10. [REDACTED], 2005, Techniques for Real Normalization of Complex Modal Parameters for Updating and Correlation with FEM models, University of Cincinnati.
11. [REDACTED], 2005, Development and Comparison of Analytic, Numerical and Experimental Techniques to Formulate Four-pole Matrices of Three-dimensional Acoustic Systems, University of Cincinnati.
12. [REDACTED], 2005, Vibration Analysis of Gear System as Combined Rotor System Based on Complex Rotor Variable, University of Cincinnati.
13. [REDACTED], 2004, Diagnostic Reliability of Guidewire in Evaluation of Coronary Artery Stenoses, University of Cincinnati.
14. [REDACTED], 2004, Biodynamic Modeling and Analysis of Motor Vehicle Rollover Occupants, University of Cincinnati.
15. [REDACTED], 2003, Experimental Formulation of Four-pole Parameters for Analytical-experimental Hybrid Modeling of Acoustic Systems, University of Cincinnati.

16. [REDACTED], 2002, A Genetic Algorithm Approach to Minimize Transmission Error for Automotive Spur Gearsets, University of Alabama.
17. [REDACTED], 2002, Parametric Study of Viscoelastic Damping and Its Application in Reduction of Structural Vibrations, University of Alabama.
18. [REDACTED], 2001, Surface Modifications of Intermetallic Materials, University of Alabama.
19. [REDACTED], 2001, A Numerical Study of Ratcheting at Notch Under Combined Bending and Torsion, University of Alabama.
20. [REDACTED], 2000, A Bearing Fault Diagnostic Program for Education and Exploratory Research, University of Alabama.
21. [REDACTED], 1998, Structural Modal and Acoustic Radiation Properties of Ring Gears, Ohio State University.
22. [REDACTED], 1997, Estimation of Mount Properties and Impulsive Force Using Modal Methods, Ohio State University.
23. [REDACTED], 1996, Vibration Measurement of the Back-to-back Test Stand by Using Laser Vibrometer, Ohio State University.
24. [REDACTED], 1996, Static and Dynamic Transmission Error Measurements and Predictions, and Their Relation to Measured Noise for Several Gear Sets, Ohio State University.
25. [REDACTED], 1996, An Evaluation of the Gear noise in an Automatic Transmission, Ohio State University.

#### **M.Sc. Non-Thesis Supervisory Committees Served**

1. [REDACTED], 2010, University of Cincinnati.
2. [REDACTED], 2000, University of Alabama – served as major advisor
3. [REDACTED], 2000, University of Alabama
4. [REDACTED], 2000, University of Alabama
5. [REDACTED], 1999, University of Alabama
6. [REDACTED], 1999, University of Alabama
7. [REDACTED], 1999, University of Alabama

#### **MEng. Supervisory Committees Served**

1. [REDACTED], 2017, University of Cincinnati
2. [REDACTED], 2017, University of Cincinnati
3. [REDACTED], 2017, University of Cincinnati
4. [REDACTED], 2017, University of Cincinnati.
5. [REDACTED], 2016, University of Cincinnati.

#### **Undergraduate Research Projects Supervised**

1. [REDACTED] (B.Sc., 2011, University of Cincinnati), Hypoid and Bevel Gear Mesh and Dynamics Simulation, Undergraduate Research Assistantship, Spring 2009 – Fall 2010.
2. [REDACTED] (B.Sc., 2000, University of Alabama), Dynamic Signal Measurements for Noise and Vibration Applications, Undergraduate Research Scholarship, Fall 1999 and Spring 2000.



3. [REDACTED] (B.Sc. 2000, University of Alabama), Laboratory Techniques for Vibro-acoustic Studies, Special Topic, Spring 2000.
4. [REDACTED] (B.Sc. 1999, University of Alabama), Precision Gear Dynamics and Acoustics, Undergraduate Research Scholarship, Fall 1999.
5. [REDACTED] (B.Sc., 1999, University of Alabama), Development of a Computational Scheme to Predict Bearing Stiffness, Computer-based Honors Program, Fall 1998 and Spring 1999.
6. [REDACTED] (B.Sc., 1997, Ohio State University), Application of Sound Quality Techniques to Motorcycle Exhaust Noise, Honors Project, Spring and Summer 1997.

#### **Post-Doctoral Fellows and Research Scholars Supervised**

1. [REDACTED], Post-doctoral Research Fellow, 2020-present, University of Texas at Arlington.
2. [REDACTED], Assistant Research Professor, 2018-present, University of Texas at Arlington; and Post-doctoral Research Fellow, 2017-2018, University of Cincinnati.
3. [REDACTED], Research Associate, 2019-2020, University of Texas at Arlington.
4. [REDACTED], Visiting Research Scholar (Nanjing Tech University), 2019-2020, University of Texas at Arlington.
5. [REDACTED], Visiting Research Scholar (Chongqing University of Technology), 2018-2019, University of Texas at Arlington.
6. [REDACTED], Research Associate, 2018-2019, University of Texas at Arlington; and Research Assistant, 2017-2018, University of Cincinnati.
7. [REDACTED], Visiting Research Scholar (Chongqing University of Technology), 2018-2019, University of Texas at Arlington.
8. [REDACTED], Visiting Research Scholar (Guangxi Liugong Machinery), 2017-2018, University of Cincinnati (2017), University of Texas at Arlington (2017-2018).
9. [REDACTED], Visiting Research Scholar (Chongqing University), 2016-2018, University of Cincinnati (2016-2017), University of Texas at Arlington (2017-2018).
10. [REDACTED], Visiting Research Scholar (Chongqing University), 2016-2018, University of Cincinnati (2016-2017), University of Texas at Arlington (2017-2018).
11. [REDACTED], Visiting Research Scholar (Chongqing University), 2015-2017, University of Cincinnati.
12. [REDACTED], Visiting Research Scholar (Northwestern Polytechnical University), 2015-2017, University of Cincinnati.
13. [REDACTED], Visiting Associate Professor (Northeast Petroleum University), 2016-2017, University of Cincinnati.
14. [REDACTED], Visiting Research Scholar (Southwest Jiaotong University), 2015-2016, University of Cincinnati.
15. [REDACTED], Visiting Associate Professor (Henan University of Science and Technology), 2015-2016, University of Cincinnati.
16. [REDACTED], Visiting Lecturer (Henan University of Science & Technology), 2015-2016, University of Cincinnati.
17. [REDACTED], Visiting Associate Professor (Huazhong Agricultural University), 2015-2016, University of Cincinnati.
18. [REDACTED], Visiting Associate Professor (Luoyang Institute of Technology), 2015-2016, University of Cincinnati.
19. [REDACTED], Visiting Research Scholar (Chongqing University), 2014–2016, University of Cincinnati.

20. [REDACTED], Visiting Research Scholar (Chongqing University), 2014–2015, University of Cincinnati.
21. [REDACTED], Visiting Professor (Nanjing University of Aeronautics and Astronautics), 2013–2014, University of Cincinnati.
22. [REDACTED], Visiting Associate Professor (Jingnan University), 2013–2014, University of Cincinnati.
23. [REDACTED], Post-doctoral Research Fellow, 2014–2015, University of Cincinnati.
24. [REDACTED], Senior Research Associate, 2011–present, UC Simulation Center, University of Cincinnati.
25. [REDACTED], Visiting Research Scholar (Southwest Jiaotong University), 2012–2014, University of Cincinnati.
26. [REDACTED], Visiting Professor (Chongqing University), 2012 (July–August), University of Cincinnati.
27. [REDACTED], Visiting Research Scholar (Chongqing University), 2011–2012, University of Cincinnati.
28. [REDACTED], Visiting Research Scholar (Northeastern University), 2011–2013, University of Cincinnati.
29. [REDACTED], Visiting Professor (Chongqing University), 2011, University of Cincinnati.
30. [REDACTED], Visiting Research Scholar (Chongqing University), 2010–2012, University of Cincinnati.
31. [REDACTED], Visiting Research Scholar (Chongqing University), 2010–2011, University of Cincinnati.
32. [REDACTED], Visiting Professor (Chongqing University), 2010, University of Cincinnati.
33. [REDACTED], Visiting Professor (Harbin Institute of Technology), 2010–2011, University of Cincinnati.
34. [REDACTED], Visiting Research Scholar (Harbin Institute of Technology), 2010–2011, University of Cincinnati.
35. [REDACTED], Post-doctoral Research Fellow, 2010, University of Cincinnati.
36. [REDACTED], Visiting Research Scholar (Chongqing University), 2009–2010, University of Cincinnati.
37. [REDACTED], Visiting Research Scholar (Chongqing University), 2009–2010, University of Cincinnati.
38. [REDACTED], Research Associate, 2006–2013, University of Cincinnati; and Post-doctoral Research Fellow, 2005–2006, University of Cincinnati.
39. [REDACTED], Visiting Chair Professor (Hong Kong Polytechnic University), 2008 (April–May), University of Cincinnati.
40. [REDACTED], Visiting Professor (Nanchang University), 2005–2006, University of Cincinnati.
41. [REDACTED], Post-doctoral Research Fellow, 2003–2004, University of Cincinnati.
42. [REDACTED], Research Associate, 2006, University of Cincinnati; Post-doctoral Research Fellow, 2002–2006, University of Cincinnati; and Post-doctoral Research Fellow, 1999–2002, University of Alabama.
43. [REDACTED], Post-doctoral Research Fellow, 2002–2003, University of Cincinnati; and Post-doctoral Research Fellow, 2001–2002, University of Alabama.
44. [REDACTED], Visiting Research Scholar (Shijiazhuang Institute of Mechanical Engineering), 2001–2002, University of Alabama.
45. [REDACTED], Post-doctoral Research Fellow, 1998–2001, University of Alabama.
46. [REDACTED], Post-doctoral Research Fellow, 2000, University of Alabama.

## SPONSORED RESEARCH (COMPLETE DETAILS)

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### List of Research Contracts and Grants Awarded (~\$20.0 million)

1. “High Performance Modeling and Simulation Center (UC Simulation Center),” Proctor and Gamble (P&G), \$12,401,000, 9/2008–6/2017, PI: Teik C. Lim, (co-PI: Yijun Liu, ended 12/31/2011). Center continues to receive support from P&G beyond 6/2017 in Cincinnati under a new PI (Frank Gerner).
2. “Development of Analytical Multi-body System Dynamic Models for High Speed Bevel and Hypoid Gears,” An Industry Consortium (Current and Past Sponsors: FCA (formerly Chrysler), Toyota, Daimler, GM, Linamar, Hyundai, Liugong, Ford, Komatsu, Romax, Meritor, American Axle, Caterpillar, John Deere, Dana, Visteon, Eaton, Gleason Foundation, Volvo), \$10,000 per year per sponsor, Total of \$1,321,440 since 1/1997–present, PI: T.C. Lim.
3. “Automotive active noise cancellation,” Mentor Graphics, \$150,000, 1/2016–12/2018, PI: Teik C. Lim.
4. “Active Virtual Sounds Screen System for Vehicle Noise Reduction and Speech Enhancement, Ford University Research Program, \$120,000, 5/2015–5/2018, PI: Teik C. Lim.
5. “Active Interior Sound Quality Control for NVH Refinement,” Ford University Research Program, \$120,000, 5/2011–5/2014, PI: Teik C. Lim.
6. “Bearing Dynamics Post-Processing Analysis,” Romax Technology and Universal Bearings, \$25,000, 8/2011–7/2012, PI: Teik C. Lim.
7. “New School Faculty Development for Curricular Reform,” UC Faculty Development Council, \$15,000, 3/2010–6/2011, PI: Teik C. Lim.
8. “Development of an ANC System for MRI Compatible Headphone to Treat Noise Emitted During Scanning Operation,” Resonance Technology Inc., \$180,000, 1/2010–12/2013, PI: J.H. Lee, co-PI: Teik C. Lim.
9. “Application Engineers for Technosoft,” Technosoft Inc., \$169,440, 1/2010–12/2010, PI: F.M. Gerner, co-PI: Y. Liu and Teik C. Lim.
10. “Development of an Active Noise Control System Package for Treating Powertrain and Road Noise Response,” Ford Motor Company, \$105,000, 6/2009–1/2010, PI: Teik C. Lim.
11. “Development of an Active Control System Package for Transient and Broadband NVH Disturbances from Powertrain Sources,” Ford Motor Company, \$100,000, 1/2008–4/2009, PI: Teik C. Lim.
12. “Spiral Bevel Gear Dynamic Modeling for Off-highway Vehicle Application,” Caterpillar, \$197,100, 6/2007–6/2009, PI: Teik C. Lim.
13. “Engineering Education through Degree-long Project Experience,” National Science Foundation, \$150,000, 7/1/2007–6/30/2010, PI: J.H. Kim, co-PI: R. Allemang, R.W. Rost, Teik C. Lim.
14. “Development of an Active Noise Control System for Broadband Frequency Response,” Ford Motor Company, \$75,000, 1/2007–1/2008, PI: Teik C. Lim.
15. “Active Acoustic Noise Cancellation for MRI,” National Institute of Health, R21 project, \$390,521, 5/2006–4/2009, PI: J.H. Lee, co-PI: Teik C. Lim.
16. “Evaluation of Prognostics Tools for Failure Prediction of Critical Components in Combat Vehicles for Future Combat Systems,” TARDEC – National Automotive Center, U.S. Army TACOM, \$50,000, 1/2007–1/2008, PI: J. Lee, co-PI: Teik C. Lim and R. Allemang.

17. "A Feasibility Study for Integrity Testing of Chemical Protective Suits," Lion Apparel, \$24,000, 5/2006–10/2006, PI: Teik C. Lim, co-PI: K. Vemaganti.
18. "Product Opportunity Space for Firefighter Turnout CBRN," Lion Apparel, \$20,000, 5/2006–12/2006, PI: C. Vogel, co-PI: Teik C. Lim, C. Allen.
19. "Development of NI Labview Programs for Compressor Sound and Vibration Testing," Copeland Corporation, \$30,000, 4/2006–9/2006, PI: Jay Kim, co-PI: Teik C. Lim.
20. "HVAC Compressor Sound and Vibration Engineering," Copeland Corporation, \$108,000, 3/2006–9/2006, PI: Teik C. Lim.
21. "Development of an Acoustic Transfer Function Active Control System for Automotive Powertrain Noise," Ford Motor Company, \$75,000, 10/2005–9/2006, PI: Teik C. Lim.
22. "Spectral Based Substructuring for Gear Whine NVH Modeling," Ford Motor Company, \$75,000, 10/2005–9/2006, PI: Teik C. Lim.
23. "Acoustic Noise Quality Analysis of an Automotive Solenoid Valve," Hi-Stat, \$20,150, 10/2005–12/2005, PI: Teik C. Lim.
24. "Hypoid LDP – Development of Hypoid Gear Load Distribution Program," Ohio State University Gearlab, \$28,846, 6/2005–6/2006, PI: Teik C. Lim.
25. "Driveline NVH Modeling," Dana, \$51,000, 5/2005–1/2007, PI: Teik C. Lim.
26. "Investigation of the Face-hobbed Hypoid Tooth Wear Problem," Visteon, \$60,000, 2/2004–1/2006, PI: Teik C. Lim.
27. "Rotorcraft Cabin Noise Quality Analysis," Sikorsky Aircraft Corporation, \$106,114, 9/1999–2006, PI: Teik C. Lim.
28. "Modeling Tools and Methodology for Rear Axle Gear Whine," Ford Motor Company, \$75,000, 7/2003–9/2004, PI: Teik C. Lim.
29. "Active Acoustic Noise Control for High-speed MRI Scanners," College of Medicine Dean's Discover Fund, \$34,998, 11/2003–10/2004, PI: J-H. Lee, co-PI: Teik C. Lim, C.K.Holland.
30. "Active Noise and Vibration Control in High Power Density Gearboxes," Army Research Office, \$532,572, 4/2000–12/2003, PI: Teik C. Lim, co-PI: W.S. Shepard Jr.
31. "Railroad Crossing Safety Technologies," Federal Railroad Administration, \$349,590, 6/2001–12/2003, PI: J.K Parker, co-PI: Teik C. Lim.
32. "Liquid Fuelled Fuel Cell APU System – ATTI," U.S. Army TACOM and Ballard Power Systems, \$561,138, 10/2001–10/2003, PI: S.R. Bell, co-PIs: Teik C. Lim, W.S. Shepard Jr., A.M. Lane, K.A. Woodbury.
33. "Liquid Fuelled Fuel Cell APU System – DUST," U.S. Army TACOM and Ballard Power Systems, \$202,093, 5/2001–5/2003, PI: S.R. Bell, co-PIs: Teik C. Lim, W.S. Shepard Jr., J. Baker.
34. "Dynamic Modeling and Analysis of Right-angle Geared Rotor System," National Science Foundation, \$259,430, 9/1999–8/2003, PI: Teik C. Lim.
35. "Dynamics of Advanced Drivetrain Systems," Ford Motor Company and Center for Advanced Vehicle Technologies (funded by the US Department of Transportation), \$46,137, 5/2001–8/2002, PI: Teik C. Lim.
36. "Year 4 – An Analytical, Computational and Experimental Study of the Dynamics, Durability and NVH Characteristics of Automotive Structures," Center for Advanced Vehicle Technologies (funded

by the US Department of Transportation), \$145,600, 5/2002–5/2003, PI: Teik C. Lim, co-PI: M.E. Barkey.

37. “An Analytical, Computational and Experimental Study of the Dynamics, Durability and NVH Characteristics of Automotive Structures,” Center for Advanced Vehicle Technologies (funded by the US Department of Transportation), Ford Motor Company, and DaimlerChrysler, \$560,072, 5/1999–8/2002, PI: Teik C. Lim, co-PI: M.E. Barkey.
38. “Acquisition of a Scanning Laser and Rotational Vibrometer Test System to Support Mid-frequency Vibro-acoustic Research,” Army Research Office and Office of Naval Research, \$311,584, 4/2001–3/2002, PI: W.S. Shepard Jr., co-PI: Teik C. Lim.
39. “Vibration Coupling Modeling and Design Strategies for Precision Powertrain Components,” Eaton Innovation Center and Center for Advanced Vehicle Technologies (funded by the US Department of Transportation), \$58,333, 5/2000–12/2001, PI: Teik C. Lim.
40. “Development of Vibro-acoustics and Sound Quality Research Grant,” Meritor Automotive, \$37,000, 11/1998–12/2000, PI: Teik C. Lim.
41. “Development of FRF-based Sub-structuring Technique for Vehicle System Analysis,” Ford Motor Company, \$25,000, 8/1998–12/1999, PI: Teik C. Lim.
42. “High-speed Multichannel Measurement System for Structural Vibration and Acoustics Research,” Ford Motor Company and Alabama Institute of Manufacturing Excellence, \$55,000, 8/1998–9/1999, PI: Teik C. Lim.
43. “Automatic Transmission Planetary Gear Noise Analysis,” Ford Motor Company, \$145,757, 11/1997–9/1999, PI: Teik C. Lim.
44. “Crank Rumble Noise Objective Measurement and Analysis,” Honda of America Manufacturing, \$32,479, 9/1997–9/1999, PI: Teik C. Lim.
45. “A System Approach for Exhaust Noise Designed for Brand Characteristics,” General Motors Research and Development Center, \$150,559, 8/1997–12/1998, PI: A. Selamet, co-PI: Teik C. Lim.
46. “Development of Quantitative Methods to Determine Sound Quality of Automotive Doors, Latches and Motors,” Chrysler Challenge Fund, \$163,232, 7/1996–9/1998, PI: Teik C. Lim.
47. “Supercharger and Transmission Gear Vibration Modeling and Analysis,” Eaton Corporate Research and Development, \$87,600, 7/1996–8/1998, PI: Teik C. Lim.
48. “Vehicle System and Component Noise, Vibration, Dynamics and Sound Quality Studies,” Sponsors: Cooper Tire and Rubber Company, Transportation Research Center, Samsung Electro-Mechanics, Tube Products, Federal Mogul and IMI, \$54,100, 12/1996–6/1998, PI: Teik C. Lim.
49. “Truck Engine Noise Analysis,” Mack Trucks, \$43,500, 4/1997–8/1997, PI: Teik C. Lim.
50. “Transmission Gear Noise Measurement and Analysis,” Honda of America Manufacturing, \$13,984, 7/1996–3/1997, PI: Teik C. Lim.

#### **List of Institutional, Center and Laboratory Grants**

1. “Engineering and Research Center – Occupational Safety and Health Engineering,” National Institute of Occupational Safety and Health (NIOSH), \$1,128,505, 7/2011–6/2016, PI: J.H. Kim, co-PI: H. Spitz, Key Investigators: Teik C. Lim, M.J. Schulz, R. Banerjee, S.Y. Son, T. Huston, P.A. Stuebbe. Part of the NIOSH ERC at UC for \$9.6million.

2. “Coming out of the Pipeline: The UC Interdisciplinary Pathway to STEM Professionals,” Choose Ohio First Scholarship Program (COFSP) – An Ohio General Assembly-created Ohio Innovation Partnership designed to significantly strengthen Ohio’s competitiveness in science, technology, engineering, mathematics and medicine (STEM) and STEM education, \$3.082million, awarded March 7, 2008, co-PI and key member of an interdisciplinary team of faculty leading the effort.
3. “PACE – Partners for the Advancement of Collaborative Engineering Education,” GM, EDS, HP, Siemens, Sun, \$420,687,132 (in-kind computational hardware and software), awarded October 5, 2007, key member of a team of faculty in Engineering and DAAP leading the project.
4. “Center for Advanced Vehicle Technologies,” US Department of Transportation, established through the Transportation Equity Act for the 21st Century (TEA-21) in 1998 to support interdisciplinary research in development of efficient, safe, secure, economical, durable, comfortable, and user- and environmentally-friendly vehicles, key member of a team of engineering faculty leading the effort.
5. “Advanced Instrumentation for Machinery Acoustics and Vibration Research,” Ohio Board of Regents, \$1.85million, 11/1996–10/2000, PI: R. Singh, co-PI: R.J. Allemang, Key investigators: D.R. Houser, A. Selamet, T.C. Lim, R.G. Parker, D.L. Brown, J.H. Kim, R.W. Rost, and J. Lieh.

### **Patents**

1. M-R. Lee, T. Abe, M. Cheng, F. Vanhaaften, T.C. Lim, M. Li, J. Duan, “Multi-channel Active Noise Control System with Channel Equalization,” U.S. Patent No. 8600069, granted 12/3/2013 (filed 3/25/2011).
2. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, “Variable Bandwidth Delayless Sub-band Algorithm for Broadband Active Noise Control System,” U.S. Patent No. 9837065, granted 12/5/2017 (filed Dec 8, 2014).
3. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, “Variable Bandwidth Delayless Sub-band Algorithm for Broadband Active Noise Control System,” China Patent No. 105679304, granted 11/27/2020 (filed 12/8/2015).
4. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, “Variable Bandwidth Delayless Sub-band Algorithm for Broadband Active Noise Control System,” Mexico Patent No. 361572, granted 12/11/2018 (filed 12/4/2015).
5. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, “Variable Bandwidth Delayless Sub-band Algorithm for Broadband Active Noise Control System,” Russia Patent No. 0002696677, granted 8/15/2019 (filed 12/7/2015).
6. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, “Variable Bandwidth Delayless Sub-band Algorithm for Broadband Active Noise Control System,” Germany Application No. 102015120997.7, pending (filed 12/2/2015).
7. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, “Subband Algorithm with Threshold for Robust Broadband Active Noise Control System,” U.S. Patent No. 10121464, granted 11/6/2018 (filed 12/8/2014).
8. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, “Subband Algorithm with Threshold for Robust Broadband Active Noise Control System,” China Patent No. 105679303, granted 1/22/2021 (filed 12/8/2015).
9. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, “Subband Algorithm with Threshold for Robust Broadband Active Noise Control System,” Mexico Patent No. 365516, granted 6/5/2019 (filed 12/7/2015).

10. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, "Subband Algorithm with Threshold for Robust Broadband Active Noise Control System," Russia Patent No. 0002698639, granted 8/28/2019 (filed 11/26/2015).
11. M-R. Lee, T. Abe, M. Cheng, F.W. Vanhaaften, L. Na, T.C. Lim, M. Li, G. Sun, T. Feng, "Subband Algorithm with Threshold for Robust Broadband Active Noise Control System," Germany Application No. 102015120995.0, pending (filed 12/2/2015).

### **Provisional Patents**

1. M-R. Lee, T. Abe, M. Cheng, F. Vanhaaften, T.C. Lim, M. Li, J. Duan, "Channel Equalization Applied to Multi-Channel Active Noise Control System," Patent Record ID 83148981, March 23, 2010.
2. J-H. Lee, T.C. Lim, B. Rudd, M. Li, "Active Noise Control for MRI," Patent Record ID 61446780, Feb 25, 2011.

### **Invention Disclosures**

1. J-H. Lee, T.C. Lim, B. Rudd, M. Li, "Active Noise Control for MRI," UC file number 108-022, Sept 24, 2007.
2. M-R. Lee, T. Abe, M-T. Cheng, F. Vanhaaften, T.C. Lim, M. Li, J. Duan, "Channel Equalization Applied to Multi-Channel Active Noise Control System," Ford Disclosure Record Number 81203110, February 10, 2010.
3. M. Li, T.C. Lim, J. Duan, "A Low-cost Fast Convergence Active Control System for Effective Suppression of Harmonic Response," UC file number 111-034, October 18, 2010.
4. M. Li, T.C. Lim, J. Duan, "A Multi-input Multi-output Active Control System for Simultaneous Suppression of Harmonic Response Within a Large Sound Field," UC file number 111-037, October 19, 2010.
5. T. Feng, G. Sun, M. Li, T.C. Lim, M-R. Lee, W. Vanhaaften, M-T. Cheng, L. Na, T. Abe, "A Variable Bandwidth Delayless Sub-band Algorithm for Broadband Active Noise Control System," UC file number 114-053 (Ford disclosure record number 83439189), March 10, 2014.
6. T. Feng, G. Sun, M. Li, T.C. Lim, M-R. Lee, W. Vanhaaften, M-T. Cheng, L. Na, T. Abe, "Enhanced Sub-band Algorithm with Threshold for Robust Broadband Active Noise Control System, UC file number 114-054 (Ford disclosure record number 83439418), March 10, 2014.
7. T. Feng, T.C. Lim, M. Li, M-R. Lee, M-T. Cheng, L. Na, "Convex Combination Filtered-x LMS Algorithm for Multichannel Active Control of Harmonic Noise," UC File number 117-047 (Ford disclosure record number 83791887), February 20, 2017.
8. T. Feng, T.C. Lim, M. Li, M-R. Lee, M-T. Cheng, L. Na, "An Effective Active Vehicle Road Noise Control System with Advanced Reference Channels Self-adjustment Technique," UC File number 117-072 (Ford disclosure record number 83792118), May 3, 2017.

### **Funded Engineering Research and Development Projects at SDRC (1990-1996)**

(Total funding approximately \$2.0 million)

1. "Powertrain Structure Modal Analysis," Daewoo, 1995.
2. "Powerplant Environmental Noise Analysis," ABB, 1995.
3. "Low Frequency Vehicle Shake Problem," Daewoo, 1994.
4. "Vehicle Body Vibration Characterization," Hyundai, 1993–1994.
5. "Vibration Testing, Modeling and Analysis of Exhaust Structures," Mazda, 1993–1994.
6. "Concept Design Optimization of an Engine Mounting System," Nissan, 1993.
7. "Automotive Seat Track Noise Quality Analysis," Johnson Controls, 1993.

8. "Automotive Electronic Accessory Vibration and Durability Testing," Ford, 1993.
9. "Truck Axle Noise Minimization," General Motors, 1993.
10. "Body Acoustics Sensitivity Analysis," Isuzu, 1992.
11. "Transaxle Gear Noise Modeling," Isuzu, 1992.
12. "Spiral Bevel Gear Modeling," Caterpillar, 1992.
13. "Hydro-pneumatic Suspension Response Modeling," Teledyne Continental Motors, 1992.
14. "Shock Response of Mobile Communication Shelter," Ballistic Research Laboratory, 1991.
15. "Road Noise Transmissibility from the Rear Suspension," Nissan, 1991.
16. "Road Noise Transmissibility from the Front Subframe," Nissan and Estech, 1991.
17. "Infiniti Q45 Final Drive Gear Noise Simulation," Nissan, 1990–1991.
18. "ZN Transmission Gear Noise," Nissan and Estech, 1990.

## **PROFESSIONAL AND SERVICE ACTIVITIES (FULL LISTING)**

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### **Professional Memberships**

- National Academy of Inventors (NAI), Fellow, 2018–present
- American Association for the Advancement of Science (AAAS), Member, 2011–present
- International Society for Optical Engineering, Member, 2006–present
- Society of Experimental Mechanics, Member, 2003–present
- Tau Beta Pi, National Engineering Honor Society, Member, 2002–present
- International Institute of Acoustics and Vibration (IIAV), Member, 2002–present
- Vertical Flight Society (previously American Helicopter Society), Member, 2000–present
- American Society of Engineering Education (ASEE), Professional Member, 1999–present
- Society of Automotive Engineers (SAE International), Member, 1990–present (Fellow since 2006)
- Acoustical Society of America (ASA), Member, 1990–present
- American Society of Mechanical Engineers (ASME), Member, 1989–present (Fellow since 2006)
- Institute of Noise Control Engineering (INCE), Member, 1989–present
- Phi Eta Sigma, National Honor Society, Member, 1984–present

### **Professional Organizations**

- Texas International Education Consortium, Board of Directors, 2020–present
- North Texas LEAD, Board of Directors 2020–present
- Dallas Regional Chamber (including Dallas Thrives), Board of Directors 2020–present
- Texas Health Resources, Community Impact Board of Trustees, 2020–present
- Greater Arlington Chamber of Commerce, Executive Committee, Board of Directors, 2020–present
- Fort Worth Chamber of Commerce, Ex-officio Board Member, 2020–present
- Excelencia in Education, Board of Presidents, 2020–present
- APLU, Powered by Publics Initiative, Metropolitan Cluster 7, Lead, 2020–present
- Council of Public University Presidents and Chancellors, Texas, 2020–present
- Sunbelt Athletic Conference, NCAA Division I, Board Member, 2020–present
- Dallas Citizen Council, 2020–present



- I-INCE FCTP Committee Advisory Board, 2017–2020
- National Academy of Inventors, UTA Campus Chapter Member, 2020–present
- ASME Power Transmission and Gearing Committee, Vice-Chair (2014–2016), Chair (2016–2018)
- Univ of Cincinnati Research Institute (UCRI), Transition Team & Board Member (ex-officio), 2012–2017
- TechSolve Inc., Board of Directors, 2012–2017
- Gear Research Institute, Board of Trustees from ASME, 2012–present
- INCE Board of Directors (Member), 2011–2012, 2013–2014
- INCE Publications (Vice-President), 2014–2017
- INCE Technical Activities (Vice-President), 2010–2013
- INCE Student Activities and Awards, 2010–2016
- INCE Conference Transition and Detailed Planning Committee (chair 2008–2009), 2008–2010
- INCE Technical Activities Board, 2004–2008
- INCE Instrumentation and Measurement Techniques Committee (chair), 2004–2007
- 2012 FISITA, NVH Technical Committee, 2011–2012.
- ASA Structural Acoustics and Vibration Technical Committee, 2005–2023
- ASME Power Transmission and Gearing Conference Committee, 2002–present
- SAE Noise and Vibration Conference Committee, 1997–present
- Registered Professional Engineer in the State of Texas, Ohio and Alabama  
Member of the National Council of Examiners for Engineering and Surveying (NCEES)  
P.E. exam passed 2002 (Alabama); Engineer-in-Training exam passed 1985 (Michigan)

### **Conference and Meetings Organized**

- *Inter-Noise 2021 Congress*, International Advisory Board, Washington D.C., 2021.
- *ASME International Power Transmission and Gearing Conference*, Organizing Committee, Anaheim, CA, 2019.
- *International Gear Conference*, International Committee member, Lyon, France, 2018.
- *47<sup>th</sup> International Congress and Exposition on Noise Control Engineering*, Technical co-chair, Chicago, IL, 2018.
- *ASME International Power Transmission and Gearing Conference*, General Chair, Cleveland, OH, 2017.
- *5th IAJC/ISAM Joint International Conference*, Advisory Board, Orlando, FL, 2016.
- *The 7<sup>th</sup> International Conference on Vibration Engineering*, Advisory Committee, 2015.
- *ASME International Power Transmission and Gearing Conference*, Program Chair, Boston, MA, 2015.
- *4th IAJC/ISAM Joint International Conference*, Advisory Board, Orlando, FL 2014.
- *International Gear Conference*, International Committee, Lyon-Villeurbanne, France, 2013.
- *International Conference on Vehicle Noise, Vibration and Safety Technology (ICNVNST2011)*, Technical Committee Member, Chongqing, China, 2011.
- *International Conference on Power Transmission (ICPT2011)*, International Scientific Committee Member, Xian, China, 2011.
- *Noise-Con 2008 Conference and 30th Annual Conference of ASME's Noise Control and Acoustics Division*, General Chair, Detroit, Michigan, 2008.

- *ASME International Power Transmission and Gearing Conference*, Gear Dynamics, Session Chair, Las Vegas, Nevada, 2007.
- *Inter-Noise 2006 Conference*, Organizing Committee and session chair, Honolulu, Hawaii, 2006.
- *SAE Noise and Vibration Conference & Exposition*, General Committee, Traverse City, Michigan, 1997–present (held biennially). Also, Session Organizer and Chair for Powertrain/Engine: Drivetrain; and recognized for substantial contribution as a session organizer.
- *SAE World Congress*, Experiments in NVH, Session Organizer and Chair, Detroit, Michigan, 2005.
- *ASME International Power Transmission and Gearing Conference*, Gear Dynamics, Session Chair, Chicago, Illinois, 2003.
- *Inter-Noise 2002 Conference*, Mid-frequency Range Vibro-acoustic Method, Technical Organizer & Session Chair, Dearborn, Michigan, 2002.
- *Engineering Structure and Development Conference*, Session Chair, Singapore, 2001.
- *ASME International Power Transmission and Gearing Conference*, Gear Dynamics, Session Chair, Baltimore, Maryland, 2000.

### **Editor/Referee Duties**

#### **Editors:**

- Journal of Mechanical Engineering Science, Editorial Board, 2012–2017
- Chinese Journal of Mechanical Engineering, Editorial Board, 2009–2017
- International Journal of Vehicle Noise and Vibration, Editorial Board, 2002–present
- Journal of Mechanical Design, Associate Technical Editor, 2004–2008

#### **Referees:**

- Journal of Sound and Vibration
- Journal of the Acoustical Society of America
- Applied Acoustics
- International Journal of Vehicle Noise and Vibration
- Noise Control Engineering Journal
- Nonlinear Dynamics
- Non-Linear Mechanics.
- IEEE Transactions:   Neural Networks and Learning Systems  
                                  Biomedical Engineering  
                                  Control Systems Technology  
                                  Journal of Nanoscience and Nanotechnology  
                                  Vehicular Electronics and IVHS
- ASME Transactions:   Journal of Mechanical Design  
                                  Journal of Vibration and Acoustics  
                                  Journal of Engineering for Gas Turbine and Power  
                                  Journal of Vibration, Acoustics, Stress, and Reliability in Design
- Advances in Vibration Engineering
- Journal of Low Frequency Noise, Vibration and Active Control
- Journal of Vibration and Control
- IMechE Journal of Multi-body Dynamics
- IMechE Journal of Automobile Engineering
- Mechanisms and Machine Theory
- Journal of Mechanical Engineering Science
- Journal of Mechanical Science and Technology
- Meccanica

- Machines
- Applied Mathematical Modeling
- Advances in Mechanical Engineering
- Finite Elements in Analysis and Design
- Journal of Composite Materials
- Sensors
- AIAA Journal
- Structural Engineering and Mechanics – An International Journal
- ASCE Journal of Engineering Mechanics
- Journal of Engineering Tribology
- International Journal of Heavy Vehicle Systems
- International Journal of Vehicle Design
- Recent Patents on Mechanical Engineering
- International Journal of Engineering, Science and Technology
- Journal of Engineering Research
- Engineering Science and Technology, an International Journal
- Journal of Engineering Science and Technology
- Packaging Technology and Science
- Journal Cogent Engineering
- Central European Journal of Engineering
- International Journal of Electronics and Communications
- Chinese Journal of Mechanical Engineering
- Measurement
- SAE Transactions, International Journal of Passenger Cars
- *SAE Noise and Vibration Conference and Exposition*
- *ASME Conferences:*    *International Power Transmission and Gearing Conference*  
                                   *International Gas Turbine and Aeroengine Congress*  
                                   *Mechanical Vibration and Noise Conference*  
                                   *Symposium on Structures under Extreme Loading*  
                                   *International Mechanical Engineering Congress and Exposition (IMECE)*
- *ASEE Conference*
- *IEEE Control Systems Magazine*
- *FISITA World Automotive Congress*
- *Inter-Noise 2012* Student Paper Competition
- *7th International Styrian Noise, Vibration & Harshness Congress*
- NIH Clinical Neurophysiology, Devices, Neuroprosthetics & Biosensors Small Business Panel
- Ohio Board of Regents, Reviewer for new PhD program at Cleveland State University
- Indiana Economic Development Corporation (21<sup>st</sup> Century Fund), Research Proposal
- Army Research Office (ARO), Research Proposal
- Kentucky Science and Engineering Foundation (KSEF)
- Arnold Publisher
- Taylor & Francis / CRC Press
- John Wiley and Sons

## **Departmental, College and University Services**

### **University of Texas System**

- Gates Foundation Post-secondary Value Commission, Working Group, 2021–present
- Texas Credentials for the Future, Steering Committee, 2021–present
- Council of Academic Provosts, 2017–2020
- ACE/NASH Academy, UT System Team, 2017–2018

### **University of Texas at Arlington**

- Center for Entrepreneurship and Economic Innovation, Collaborators Committee, 2020–present
- Budget Policy Committee, 2017–present
- ERM Project Steering Committee, 2019–present
- CRM Project Executive Sponsor, 2019–present
- Faculty Senate (ex-officio), 2017–present
- Threat Assessment Team, 2017–present
- Institutional Audit Committee, 2017–present
- Internal Audit Committee, 2017–present
- President's Leadership Council, 2017–present
- President's Advisory Board, 2017–present
- IT Governance Executive Board, 2017–present
- Compliance, Accountability, Risk and Ethics Committee, 2017–present
- Hiring Review Committee, 2017–present
- Emergency Operations Center Executive Policy Group, 2017–present
- Canvas Project Executive Committee, 2018–2019
- Co-Chair, UTA Digital Task Force, 2018–2019
- Chair, Conflict of Interest Committee, 2017–2020
- Chair, Committee on Committees, 2017–2020
- Chair, Committee on Rules and Elections, 2017–2020
- Chair, Council of Academic Chairs, 2017–2020
- Council of Deans, 2017–2020
- Undergraduate Assembly, 2017–2020
- Evaluation Committee for RFP Online Educational Service, 2017–2018
- Chair, Dean of Business Search Committee, 2017–2018
- Chair, Student Success Task Force, 2017–2018
- Liaison Committee, Center for Transforming Lives, 2017–2018
- Strategic Planning Council, 2017–2019
- Handbook of Operating Procedures (HOP) Committee, 2017–2020
- Chair, International Oversight Committee (IOC), 2017–2020
- Provost's Leadership Team, 2017–2020
- Space Acquisition, Renovation and Utilization Committee, 2017–2020
- IT Strategy Executive Board, 2017–2019
- Tuition Proposal Steering Committee, 2017

### **University of Cincinnati**

- University of Cincinnati Foundation Board of Trustees, 2015–2017
- Chair, Vice President for Research Search Committee, 2015–2016
- Co-Chair, UC Incubator Center Implementation and Long Range Committee, 2015–2016
- Chair, Council of Deans, 2015–2016
- Executive Committee, Council of Deans, 2014–2017
- Council of Deans, 2012–2017

- Ohio Engineering Dean's Council, 2012–2017
- Academic Operations Committee, 2012–2017
- Search Committee for the Vice-President for Research position, 2012–2012
- UC Board for Sponsored Research (UC STEM Research Advisory Board), 2012–2014
- UC Graduate Leadership Group, 2011–2012
- UC Graduate Council, 2011–2012
- UC Foundation Strategic Planning Committee Study Group, 2011
- Campaign Volunteer Committee, College of Engineering and Applied Science, 2009–2012
- STEM Oversight Committee, 2009–2012
- Distinguished Research Professor Award Committee, 2006–2011
- Task Force on Competitive Funding of Graduate Education, 2008
- College of Engineering Director of Finance Search Committee, 2007
- Chair, Computer Science Department Head Search Committee, 2007, 2008
- UC|21 Academic Priorities Special Grants Committee, 2007
- Solar Decathlon Project Steering Committee, 2006–2007
- Interdisciplinary Infrastructure Committee, 2006–2007
- UC Foundation Case Statement Committee, 2006
- Strategic Planning Council, 2006
- Annual Faculty Review Committee, College of Engineering, 2005–2006
- Workload Committee, College of Engineering, 2005–2006
- Mechanical Engineering Undergraduate Program Committee (chair), 2005–2010
- Mechanical Engineering Graduate Studies Committee (chair), 2007–2010
- Graduate Studies Committee, Dept. of Mechanical, Industrial & Nuclear Engineering, 2005–2007
- Honors & Awards Committee, Dept. of Mechanical, Industrial & Nuclear Engineering, 2005–2007
- Innovation Team Committee, 2005–2006
- RPT Committee, Department of Mechanical, Industrial and Nuclear Engineering, 2004
- Chair, Structural Dynamics Faculty Search Committee, 2003–2004
- Undergraduate recruiting activities, 2002–2006
- Reviewed graduate applications (UC Mechanical Engineering), 2003–2005

#### University of Alabama

- Retention, Tenure and Promotion committee, Department of Mechanical Engineering, 2001–2002
- New Building Committee, Department of Mechanical Engineering, 2000–2001
- Undergraduate Research Experience Planning Committee, College of Engineering, 1999
- Mechanical Engineering Graduate Studies Committee, 1998–2002
- Mechanical Engineering Graduate Student Seminar Faculty Coordinator, 1998–2002
- Mechanical Engineering Faculty Search Committee, 1998–2001 (resulted in 4 new faculty hiring)
- Mechanical Engineering Undergraduate Scholarship Award Committee, 1999, 2001

#### Ohio State University

- Center for Automotive Research Faculty Advisory Committee (OSU), 1996–1998

#### National Taipei University of Technology

- Honorary International Chair Professor, 2019–2022

#### Hong Kong Polytechnic University

- Mechanical Engineering Department Review Committee, 2011, 2017
- Mechanical Engineering Department Academic Advisor, 2015–2019

September 9, 2021

Presidential Search Committee  
The University of Memphis  
c/o Laurie C. Wilder, President, Parker Executive Search

Dear Members of the Search Committee,

It is with great enthusiasm and much excitement that I submit my CV with this letter of interest to apply for the President of the University of Memphis (UofM) position. Based on my review of the position profile and other pertinent information, I believe very strongly that the breadth and depth of my professional experience and personal background match up exceedingly well with this opportunity, and the collective dynamic and inspiring vision of UofM community and Board of Trustees, especially in charting the course for UofM in the next decade ahead. Below, allow me to expand on my interest in this prospect, clarify why I believe I am an excellent fit for this position, and frame my approaches to the opportunities and challenges at UofM.

Firstly, let me summarize my work experiences. More details are in my attached CV. I am currently serving as the interim president of the University of Texas at Arlington (UTA) and has been in this role since spring 2020. In this capacity, I've been able to work collaboratively and successfully in a respectful, transparent manner with our campus community including students, deans, faculty, staff and vice presidents to navigate through an unprecedented period in the presence of a global pandemic and nationwide focus on racial injustice. Despite the challenges this past year and a half, research and student success metrics including conferrals of degrees persist to reach record levels, UTA that is already a Carnegie R-1 institution became just the fourth university in Texas to achieve Texas Tier One affirming its place among an elite group of national research institutions, and the morale and attitude of the campus community are up significantly.

In summer of 2017, I joined UTA as provost and vice president for academic affairs and one of my primary goals was to help UTA attain Texas Tier One status – an ambitious drive that started a decade ago culminating with the official announcement last month. Note that UTA is already a Carnegie R-1 very high research doctoral university as mentioned above, and as well as one of a small handful of Hispanic-serving and Asian American and Pacific Islander-serving R-1 institutions in the country. I am also a professor of Mechanical and Aerospace Engineering. Previously I was dean of engineering and applied science at the University of Cincinnati (UC). Prior to that, I served as associate dean for graduate studies and research, and also department head of mechanical engineering at UC as well. Prior to my academic career, I also spent 6 years in industry and 2 years in a university research center. My early industry experience was formative years of my professional career and greatly influenced my academic work. Hence, I feel that I am a non-typical, traditional academician with a mindset that is innovative, interdisciplinary and entrepreneurial.

Secondly, there are so many amazing facets of this UofM opportunity, which are very exciting to me. Let me highlight a few of them here.

- 1) I have been observing the amazing growth and development of UofM campus, and the rapid rise in academic and research prowess of UofM programs during the last few years – accelerating closer to the attainment of Carnegie R-1 status, becoming one of the world's top universities, and enhancing student enrollment are all very impressive. To me, the opportunity to be a part of this growth to become a preeminent public research university in the state and globally is exciting and matches well with my background and interest.

- 2) My sense is that UofM is poised to further enhance its impact, visibility and quality significantly. I am extremely captivated by the quality of the faculty and students at UofM, and the impact of their research and creative works, the innovation and entrepreneurial ethos that exist, and the steadfast commitment to diversity and inclusion. These are all attributes that I firmly support and believe are key to, not only maintaining UofM success, but could form the basis for driving UofM strategic plan in the next decade.
- 3) I am very attracted to UofM's remarkable legacy and vigor of offering holistic academic experience and experiential learning that has produced many impactful alumni who are forward-looking entrepreneurs, scholars and leaders of their times. This is because throughout my professional career, I have championed a well-rounded, practical education that emphasizes sound pedagogy and fundamental theories, and also accentuates the need for a strong partnership with industry that I often describe as the bridge between the *ivory tower and smokestack*. My efforts are epitomized in some of the past and recent partnerships I led in cooperation with P&G, Siemens, and a multitude of other corporations in the effort to produce impactful graduates.
- 4) I am particularly intrigued by the very strong commitment of UofM as a public research university that is highly committed to upward mobility of students and be the beacon of life-changing opportunities. This resonates well with my passion for helping students to achieve social mobility. I grew up with limited means and supported myself through college, and subsequently became the first member in my family with a college degree. During the last 4 years here at UTA, I spent considerable efforts to bridge student access and academic excellence, to help students use education as a pathway to personal success, and to teach students to understand helping others succeed helps them succeed as well.

Thirdly, let me now articulate the possible strategies to the opportunities and challenges at UofM as I see it now. Even though these points need to be flesh out more through robust and comprehensive consultations with all the stakeholders later as part of a comprehensive strategic planning process, I hope you will still get a sense of how my experiences are in alignment with and have prepared me for this position and its responsibilities. In the next decade, the following points are what I believe should be some of the major goals.

- 1) To continue the upward trajectory of UofM, its community of scholars need to be strengthened substantially through appropriate investments in faculty, students, and capabilities including physical and digital infrastructure. This community of scholars needs to be a high performing team that is innovative, entrepreneurial, interdisciplinary and diverse. I believe diversity is the hallmark of a successful institution. Both teaching and research must be nurtured equally as they feed into each other. I have always believed that excellent researchers are inherently excellent teachers. Growth in research and creative works must accelerate, and significant increase in the effectiveness of teaching and learning should be expected.
- 2) Fundraising and advancement in a broad sense must be a priority. We need to instill the concept of pervasive development and apply innovative strategies including engagements with a wider range of stakeholders such as non-alumni and corporations. Certainly, we must launch another ambitious comprehensive fundraising campaign as soon as possible. And we need to seek more mutually beneficial partnerships with external stakeholders including industry, foundations, funding agencies, alumni, legislators and other key stakeholders.
- 3) It is imperative that a sustainable business model is adopted, which maximizes UofM's assets, and is both affordable for families and successful for students. Even before the pandemic, universities both private and public ones are already facing financial pressures related to tuition pricing and affordability, declining resources, and rising cost. The pandemic certainly has intensified the stress. Relying on tuition increase to fund the institution is not dependable. Other revenues and sources of funding are critically needed. Industry partnerships, philanthropy, optimizing enrollment, international collaborations, research, professional courses and certificates, non-traditional students, online programs, upskilling and reskilling programs, and professional services and consulting are some of the opportunities that should be explored.

4) There has to be an intense focus on student success broadly speaking, which goes beyond just increase in graduation and persistence rates. As a public institution in this era, we have the social responsibility to produce well-rounded graduates who will have positive impact to society – students come to UofM to be educated of the mind and the heart – that means we need to provide a holistic, high quality and engaging education. It will require us to seek mutually beneficial partnership with industry to enhance the education at UofM. Finally, we have to accelerate the transformation and reimagination of UofM to capitalize on the new normal post-pandemic that will have heavy reliance on the use of digital technology, software and tools in order to enhance student learning, research and engagement on and off campus.

Lastly, I like to briefly discuss my leadership style and my approaches to working with people. My commitment to the culture of cohesion, unity and consensus building, and being very transparent, engaging and accessible is unwavering. I like to earn trust and loyalty by being transparent, patience, respectful and collaborative. I honor shared governance and consult broadly, but I am also able to make decisive decisions. I tend to perform major decision-making by synthesizing from a diverse range of feedbacks and advices.

In addition, I believe that I have a good temperament, and an upbeat, positive and energetic attitude. I am a good listener and learner, and very open-minded. Being a team player is instinctive to me, and I work well with people and am a strong relationship builder. I possess strong financial acumen, good managerial skills, and the ability to pivot from one thing to another strategically and with agility, grace, resilience and courage. Also, I often view myself a micro-collaborator (as opposed to a micro-manager) – that is I am interested in deep engagement and teamwork but eager to delegate responsibly when necessary.

I also enjoy fundraising, and very interested in people's life journeys and seeing the impact of gifts on students who then go on to have impact in society (i.e. impact multiplier). I have always promoted pervasive development – everyone gets involved in promoting the University and development in their own ways.

I am a strong and committed supporter of sports and athletics, and I understand the significance and impact of intercollegiate athletics in bolstering school spirit, uniting the campus community, alumni and other key stakeholders, enhancing enrollment, fueling philanthropy, and increasing institutional reputation.

As you can see from my discussions above, I am very enthusiastic about this opportunity to be a part of UofM's journey onwards and what I can also bring to the president position. I am convinced that my academic experience, success in all my administrative appointments, innovative and entrepreneurial mindset, collaborative nature, financial acumen, personality, and commitment to educational access and excellence make me the ideal candidate for the next President of the University of Memphis. If I am so privileged to be selected, you have my full assurance that I will give my all to serve this fine institution and its students, faculty, staff and alumni. Therefore, I hope to have the chance to meet and discuss with the search committee and the Board of Trustees about this exciting prospect. Best wishes.

Yours sincerely,



Teik C. Lim, Ph.D.



## 6. Additional Business

Presented by Doug Edwards



## 7. Adjournment

Presented by Doug Edwards