





Dr. Dipankar Dasgupta, Program Director

Bootcamp for Middle School Students

July 25-29, 2016

FedEx Institute of Technology

# Welcome by A & S Dean, UofM



Dr. Thomas J. Nenon Monday, July 25<sup>th</sup>, 2016

# Cyber Security First Principles



Top Malasri, Instructor Monday, July 25<sup>th</sup>, 2016











# Cyber Code of Conducts & University Network Access Policy



Karen Bell, Systems Analyst Monday, July 25<sup>th</sup>, 2016

## Online Privacy, Security and Safe Browsing



Dr. Dipankar Dasgupta, Center Director Monday, July 25<sup>th</sup>, 2016



#### Why you need to use strong Password?

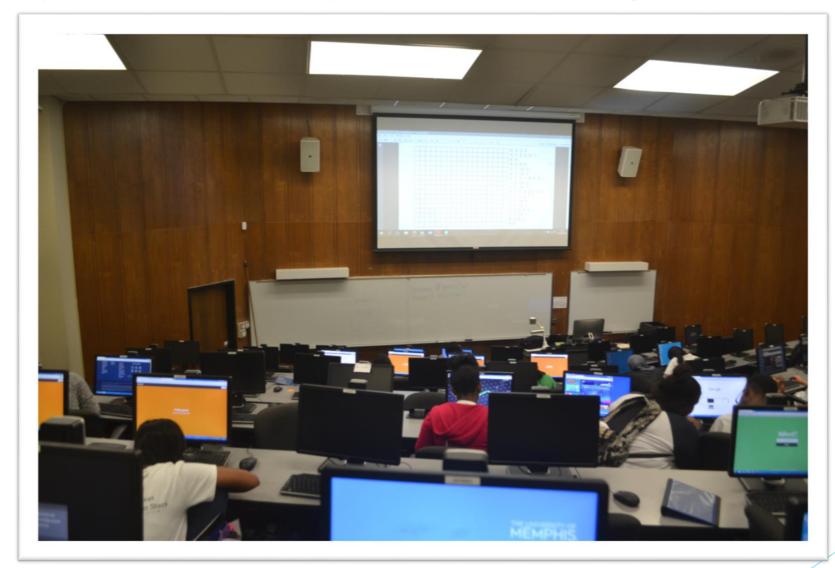


Abhijit Nag, Ph.D Student Monday, July 25<sup>th</sup>, 2016





# Cyber Security First Principles Lab



Top Malasri, Instructor Tuesday, July 26<sup>th</sup>, 2016



## Government Cyber Security Threats



Mr. Tim Marsh, FBI Tuesday, July 26<sup>th</sup>, 2016









# Cyber Security First Principles













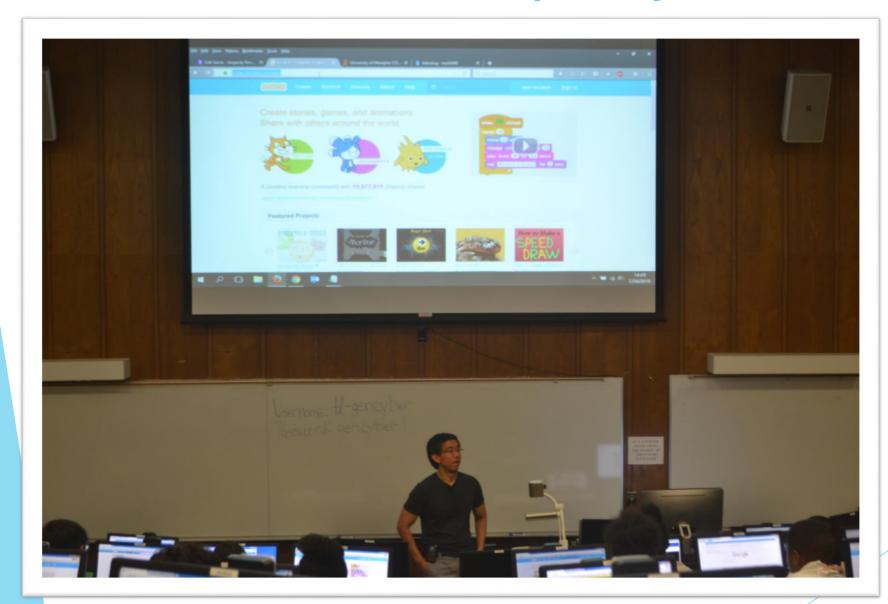
#### NSA Day of Cyber: Session 1



Rhythm Syed, Student Tuesday, July 26<sup>th</sup>, 2016



#### Introduction to Group Project: Scratch



Top Malasri, Instructor Tuesday, July 26<sup>th</sup>, 2016





#### U of M Data Center Visit



Karen Bell/Liliana Moisa Tuesday, July 26<sup>th</sup>, 2016





#### Review of Cyber Security First Principles



Top Malasri, Instructor Wednesday, July 27th, 2016



#### Security Lesson: Virtual Scavenger Hunt



Sujit Shrestha, Ph.D Student Wednesday, July 27<sup>th</sup>, 2016

## NSA Day of Cyber: Session 2



Rhythm & Irfan, Students Wednesday, July 27<sup>th</sup>, 2016

#### Online Security Demo & Lab



Berkeley & Robert, Instructors Wednesday, July 27th, 2016



#### Campus Tour: FedEx Institute of Technology



Mary Ann/Barbara R Thomas Wednesday, July 27<sup>th</sup>, 2016

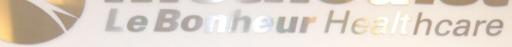


# Guest Speaker: Cyber Security Education for K-12



Dr. Wiam Younes Thursday, July 28<sup>th</sup>, 2016





#### Presentation Theatre



## Review of Cyber Security First Principles



Top Malasri, Instructor Thursday, July 28<sup>th</sup>, 2016

## Industry Guest Speaker



Meka Egwuekwe Thursday, July 28<sup>th</sup>, 2016







### Team Project work with Scratch



Top Malasri, Instructor Thursday, July 28<sup>th</sup>, 2016









Having met the criteria for measuring the depth and maturity of established programs in the field of information assurance

#### The University of Memphis

is hereby re-designated as a

### National Center of Academic Excellence in Information Assurance Education

for Academic Years 2009-2021

This certificate is presented in recognition of significant contributions in meeting the national demand for information assurance education, developing a growing number of professionals with information assurance expertise in various disciplines, and ultimately contributing to the protection of the national information infrastructure. Congratulations on your sustained growth and continuing maturation in information assurance education.

MICHAEL A. BROWN, RADM, USN

Acting Assistant Secretary for Cybersecurity and Communications, DHS KEITH B. ALEXANDER

Lieutenant General, USA Director, NSA BICHARD C. SCHAEFFER, JR.

Information Assurance Director, NSA

# Undergraduate cyber security research team



(In order from left to right: Mathew Jackowski from Rhodes College, Berkeley Willis, Aaron Marshall, Dr. Dasgupta, McKittrick Swindle, Robert Edstrom, Rachel Brandon)

## U of M Team Won CTF (Capture The Flag) challenge at Middle Tennessee Cyber Summit - May 5-6, 2014



## STUDENT TEAM WINS 2ND PLACE AT CYBER DEFENSE COMPETITION

► A team of four Computer Science students recently won second place in the prestigious <a href="CANSec Cyber Defense Competition">CANSec Cyber Defense Competition</a>, held in Little Rock on Oct. 24.



## **Upcoming Events**

## CAST Workshop on Cyber Security 16 September 2016



U.S. Department of Justice Federal Bureau of Investigation





Ransomware is a form of malware that targets both human and technical weaknesses in organizations and individual networks in an effort to deny the availability of critical data and systems. Ransomware is frequently delivered through spear phishing e-mails to end users. When the victim organization determines they are no longer able to access their data, the cyber actor demands the payment of a ransom, at which time the actor will purportedly provide an avenue to the victim to regain access to their data. Recent iterations target enterprise end users, making awareness and training a critical preventative measure.



Federal Bureau of Investigation

Cyber Task Forces www.fbi.gov/contact-us/field

Internet Crime Complaint Center www.ic3.gov

August 22<sup>nd</sup>, 2016
1pm to 3pm
FedEx Institute of Technology
University of Memphis

### Ransomware

## Cyber Security Summit | October 14, 2016

Home Speakers Sponsors Agenda Arrival Gallery Past Expos ▼



#### HOME

This year's theme: To be announced...

#### The speakers include:

To be announced...





#### Dipankar Dasgupta, Program Director

Dr. Dasgupta joined the University of Memphis as an assistant professor in 1997 and became a full professor in 2004. He is the recipient of the 2011-2012 Willard R. Sparks Eminent Faculty Award, the highest distinction and most prestigious honor given to a faculty member by the University of Memphis. Prof. Dasgupta is one

of the founding fathers of the field of artificial immune systems, making major contributions in applying bio-inspired approaches to intrusion detection, spam detection, and building survivable systems. In addition to his research and creative activities, he spearheads the University of Memphis' education, training, and outreach activities on Information Assurance as the founding director of the university's Center for Information Assurance.

Contact: dasgupta@memphis.edu



Kriangsiri ("Top") Malasri, Lead Instructor

Mr. Malasri joined the U of M's Department of Computer Science in Fall 2007 after finishing his M.S. at the University of Memphis. He has taught a wide variety of introductory computer science courses at the undergraduate level. Since Fall 2011, he has also coordi-

nated academic advising for the Department's undergraduate students. He is actively involved in recruitment and outreach activities and has been recognized extensively for his teaching and advising, including the 2012 Thomas W. Briggs Foundation Excellence in Teaching Award, 2013 Alumni Association Distinguished Advising Award, 2014 College of Arts and Sciences Award for Teaching Excellence, and 2015 College of Arts and Sciences Award for Advising Excellence.

Contact: kmalasri@memphis.edu

"You're building the future. Please build the one you want to live in."
- Hilary Mason, CEO of Fast Forward Labs



Erica Boyce, Program Assistant

Ms. Boyce is currently an Administrative Associate II with the U of M's Center for Research and Innovation in STEM Teaching and Learning (CRISTAL).

Contact: emboyce@memphis.edu

#### GenCyber Student Assistants

James Kiddy Rhythm Syed

Other U of M Staff

#### Karen Bell

Systems Analyst II, Enterprise Application Services

#### **Tammy Alexander**

Project Manager, FedEx Institute of Technology

#### **Kendra Tillis**

Business Officer II, Department of Computer Science

#### Student Volunteers

Sharifa Begum
Daya Ram Budhatoki
Robert Edstrom
Aaron Marshall
Mona Mishra
Abhijit Nag

Vamsi Krishna Polam John Shrein Sujit Shrestha McKittrick Swindle Berkeley Willis







Thank you!