

TOM TIGER

Memphis, TN • 901-000-0000 • ttiger@memphis.edu • www.linkedin.com/tomtiger

EDUCATION

University of Memphis, Memphis, TN
Bachelor of Science, Physics

Expected Graduation: May 2026

- GPA: 3.7/4.0
- Relevant Coursework: Classical Mechanics, Electromagnetism, Quantum Physics, Thermodynamics, Differential Equations, Computational Physics, Linear Algebra

SKILLS

- Lab & Technical: Oscilloscopes, Interferometers, Spectroscopy, Circuit Design, Laser Alignment, Lab Reports
- Programming: Python, MATLAB, C++, Arduino IDE, LaTeX
- Tools: Excel (advanced), Logger Pro, Mathematica, OriginPro

PROJECTS EXPERIENCE

Simulated Orbital Mechanics (Python)

Fall 2024

- Developed a Python program to simulate 2-body and 3-body gravitational systems using numerical integration (Euler and Runge-Kutta methods)
- Visualized trajectories with Matplotlib; project earned top marks and was featured in departmental showcase

Arduino-Based Thermometer with Data Logging

Spring 2024

- Built a digital thermometer using thermistors, Arduino Uno, and Excel-based data logging
- Achieved $\pm 0.5^{\circ}\text{C}$ accuracy; project helped demonstrate real-world applications of thermal physics

RELEVANT EXPERIENCE

University of Memphis, Physics Department, Memphis, TN
Undergraduate Research Assistant

August 2024 – Present

- Modeled projectile motion and oscillations in a vacuum using Python, resulting in simulations used for lecture demos and student labs
- Assisted in calibration and data collection for optics experiments, reducing experimental error margins by 12%
- Co-authored a research abstract accepted for presentation at the Regional Undergraduate Science Symposium

University of Memphis, Academic Support Center, Memphis, TN
Physics Tutor

January – May 2024

- Tutored 20+ students in introductory mechanics and E&M, leading to an average 1.5-letter grade improvement
- Created interactive practice problems and visual aids that improved comprehension of Newtonian laws and vector analysis

CERTIFICATIONS

- Radiation Safety Training – University of Memphis 2023
- Python for Scientists – Coursera 2022