Teja Koduru

11701 Swarts Drive, Fairfax, VA, 22030 • 571-489-9066 • tkoduru@umich.edu • tkoduru.tech

U.S. CITIZEN EDUCATION

University of Michigan - Ann Arbor, College of Engineering

Bachelor of Science in Aerospace Engineering, Minor in Computer Science GPA: 4.00, SAT: 1600, ACT: 36

Ann Arbor, MI Expected April 2026

WORK EXPERIENCE

MITRE Corporation

August 2021 - Present

Emerging Technologies Software Engineer

Mclean, VA

- Designed real-time path-planning algorithms for custom-built micro-UAVs in dense environments, configured MITRE's MASE lab with Loco Positioning System allowing for indoor flights of micro-UAVs, collected flight telemetry data used extensively in other MITRE UAV projects
- Designed 3 different AI models to identify disinformation campaigns on social media, tested 5 prototypes, and integrated software into MITRE's playbook for disinformation response
- Developed VR simulation of shoot-houses to help special operators train for missions, worked together with Navy SEALs representatives, presented to 50+ stakeholders including VP of MITRE.

National Institutes of Health

November 2019 - December 2020

Research Intern - Lyme Studies Unit

Bethesda, MD

- Created world's first publicly available dataset of erythema migrans (EM) rash images, critical to diagnosing lyme disease. Dataset has already been downloaded 500+ times worldwide since its publication
- Produced a phone application with TensorFlow Lite to recognize EM rashes and by extension Lyme disease, final product had above 90% accuracy in the field compared to roughly 40% accuracy of doctors
- Led testing of model, by screening patients and building an improved patient UI

RESEARCH

Albert Einstein College of Medicine

December 2021 – January 2023

COVID-19 Researcher

NYC, NY

- Conducted 4 retrospective COVID-19 epidemiology studies leveraging Python and SQLite.
- Wrote a review paper summarizing 100+ previous research articles to examine relationship between COVID-19 and cancer as well as outline avenues for future research.
- Published work in "Reviews in Cardiovascular Medicine (RCM)" journal: doi.org/10.31083/j.rcm2312389

George Mason University / U.S Army

August 2022 - May 2023

Lead Researcher

Alexandria, VA

- Led a team of 5 researchers to develop software for GMU's iFlood tool
- Implemented an LSTM model using data from sensors across the National Capital Region to predict flooding in the Chesapeake Bay; final model had an 80% accuracy and was hosted on the iFlood website: iflood.vse.gmu.edu/

SKILLS / ON CAMPUS

Software

- Python, C++, Java, C#, Linux
- SOLIDWORKS, Fusion 360, CATIA
- MATLAB/Octave

Hardware

General manufacturing

On Campus Involvement / Awards

- U.S Presidential Scholar Class of 2023 1/100 students nationwide
- International Lyme Disease Association 5k Grant Recipient
- Claes Nobel Academic Excellence Scholars 2023 20k Scholarship
- U.S Patent 63/325,350 for LymeLyte
- Project Sirius Scratch-built and programmed a custom FPV drone
- UMich MFly Team Software Developer, Autonomous Plane Team
- Georgia Tech Undergraduate Research Ambassadors