Christopher P. Tava

332377 Georgia Tech Station, Atlanta, Georgia 30332 | (609) 608-8711 | ctava3@gatech.edu|christopher-tava.github.io

Objective

To obtain a summer 2026 internship, starting May 2026, with a focus on signal processing, machine learning, and chip design.

Education

Georgia Institute of Technology | Atlanta, GA *August 2024 – Present*
Bachelor of Science in Electrical Engineering, GPA: 4.0 Expected Graduation, December 2026

Skills

Programming: Rust, C/C++, MATLAB, Java, Python (Numpy, Pandas, Matplotlib, OpenCV), TensorFlow, Data Structures/Algorithms
Hardware: Raspberry Pi, ESP32, Arduino, Teensy, nRF24l01, PCB design, Universal Robot Robotics
Software: MATLAB, KiCAD, SolidWorks, Fusion, OnShape, Git/GitHub
Professional Organizations: IEEE @ GT; Engineers Without Borders - GT; Pi Delta Phi – National French Honor Society
Languages: French (conversational), English (native)

Experience

STEM for Success at New Jersey Institute of Technology | Newark, NJ *May 2023 – June 2024*
Engineering Intern
Launched state-wide education effort to bring engineering, CAD, and Aquaponics to 10+ NJ elementary and middle schools through 10-month NJIT-funded project.

- Prototyped and designed $100 functional aquaponic system using 11-month experimental design for NJ schools
- Presented engineering project and 14-page experiment and research paper at global NJ State of Stem Conference for world education leaders and businesses

County College of Morris | Randolph, NJ *May – August 2023*
Manufacturing Engineering

- Led 6+ manufacturing/electronic projects involving resin 3D printers, metal lathes, CNC mills, Fusion 360 to optimize college subtractive manufacturing courses
- Optimized manufacturing department usage of $75,000 Universal Robot robotic arm through 4+ programming and vector motion manipulation projects

Projects

RoboCup Robotic Radio Controller | RoboJackets Robotics *August 2024 – May 2025*
Firmware Subteam
Current electrical/firmware subteam project striving to design a PCB with nRF24l01 radios and a RTIC Teensy microcontroller in Rust to run communications with team robots and run essential design and mechanical tests mid-competition.

- Established analog input via inbuilt ADC to Teensy in Rust RTIC to run 3 execution tests.
- Working to encode motor data into NRF24l01 to package into transmitter.

OpenCV/ESP-32 Patient Monitoring Restraint | 1st place Hackathon project *August 2024 – February 2025*
Addressed comfort and self-monitoring problem facing 1.4 million plus hospital patients annually with novel machine learning algorithm that detects self-harming motions via OpenCV computer vision.

- In 36 hours, established reliable Bluetooth serial connection between OpenCV script and ESP-32 to actuate servo and protect patient.
- Created 2 dual power management systems with buck convertors and voltage regulators for servo and ESP-32 sources.

Leadership

IEEE @ GT | Director of Events *May 2025 – Present*

- Managing team of 5 committee members to run the three-day IEEE @ GT RoboTech Hackathon
- Organizing 10 people to bring GT competitive robotics teams to IEEE SoutheastCon 2026

Georgia Tech Science Olympiad | Exam Supervisor + Exam Writer *September 2024 – Present*

- Designed 50+ pages of Optics exam material for 48+ schools from around the US
- Led 2 exam proctors and 4+ other volunteers in running official Optics competition per national rules