Xiaoyou Wu

Atlanta, GA 30332 | (404) 449-4771| **xwu488@gatech.edu** | **Eligible for CPT/OPT**

Objective

A driven leader in soft robotics and a passionate engineer in avionics, enjoys tackling real-life problems through mathematical modeling and embedded systems. Has over 80 hours of AP physics teaching experience, skilled at fostering mutual understanding and team collaboration.

Education

Georgia Institute of Technology | Atlanta, GA   *August 2024 – Present*
Bachelor of Science in Computer Engineering, GPA 4.00   Expected Graduation May 2026

Skills

Programming language: Java, C/C++, Python, MATLAB, JavaScript, system Verilog, Verilog
Web Development: React, MySQL, Git, HTML, CSS, Flask, Axios
Math: PID control, Multivariable Calculus, Differential Equation, Linear Algebra
Hardware: VESC, Arduino, PCB schematics/layout, serial communication protocols, circuit analysis, embedded system, power system design, SOLIDWORKS
Lab equipment: oscilloscope, waveform generator, multimeter, solder
Languages: English (Proficient), Chinese (Native)

Experience

Soft robotics Laboratory| Atlanta, GA   *October 2024 – Present*
Paid Research Assistant
Researched the behavior of spinning soft robots in viscous fluids through magnetic feedback controls for future medical usage
- Engineered feedback control systems composed of VESC motor, high-speed camera, and high-voltage coil.
- Pioneered the creation of a soft-robots physics model with MATLAB, verified with experimental data.

Projects

Flight Computer PCB design | Ramblin' Rocket Club   *September 2024 – Present*
Avionics Engineer
Designed and created a flight computer Linux PCB
- Orchestrated the schematics and routing of a PCB for the embedded Linux with STM32.
- Lead the team on high-speed layout design and signal integrity testing.

SpoilerAlert | WebDev Club   *August 2024 – December 2024*
Full stack developer
Led a team of 6 members in the development of a website designed for fridge usage tracking and recipe generation
- Directed a complete backend flask implementation integrating Gemini API for cooking recommendations.
- Collaborated on frontend React.js while integrating frontend and backend through Axios.