Mitchell Jiang

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Education

Georgia Institute of Technology, B.S.C.E., Computer Engineering — Jan. 2025 – May 2027

University of Georgia, B.S.C.S.E., Computer Systems Engineering (GPA: 3.93/4.00) — Aug. 2023 – Dec. 2024

Relevant Coursework: Software Development, Discrete Math, Logic Design, Linear Algebra, Calculus III, Physics II

Technical Skills

Languages/Software: Python, C++, Java, JavaScript, SQL, GoLang, MATLAB, HTML/CSS, GitHub, Linux, LaTeX
Hardware/Design: Raspberry Pi, Arduino, ESP32, MultiSim, Altium, PCB, Soldering, Breadboarding

Professional Experience

Embedded Software Lead, UGA Small Satellite Research Lab - Athens, GA — Jan. 2024 – Dec. 2024

- Pioneering the development of UGA SSRL's first commercial venture, LEARNSat (Low-Entry Accessible Research Network Satellite) CubeSat Kits for K-12 education and research purposes.
- Developing monitoring systems for EDGE processing devices to measure capabilities of CPUs/GPUs to run SatNERF algorithms under atmospheric conditions such as extreme temperatures, altitude, and UV radiation.

Backend Development Intern, AnagenLab – Alpharetta, GA — June 2024 – Aug. 2024

- Developed backend services using Golang, focusing on API implementation and secure data handling compliant with HIPAA standards for AnagenLab, a hair telemedicine start-up.
- Implemented a relational database in MySQL and documented the AnagenLab API using SwaggerUI.

Test Engineer Intern, Code-X – St. Petersburg, FL — June 2023 – Aug. 2023

- Worked with AWS VM on CentOS Linux, including the manual installation and shell script automation of proprietary Code-X software.
- Executed test cases while reporting and verifying 30+ UI and software bugs in Jira.

Project Experience

Breadboard ALU

- Designed and built an 8-bit Arithmetic Logic Unit (ALU) on a breadboard capable of addition, subtraction, and various bitwise operations with integrated switches and LEDs as I/O.
- Implemented control logic with integrated circuits, such as multiplexers, 4-bit adders, and logic gates.

Smart OLED Clock

- Prototyped and soldered a portable digital OLED clock capable of displaying time, temperature, and humidity.
- Programmed with Arduino IDE to handle real-time data collection and processing to ensure accurate timekeeping and sensor readings.

Two-Channel Delta-Wing RC Plane (AIAA)

- Designed, built, and tested an RC plane using lightweight foam for aerodynamics and efficient propulsion.
- Integrated servos for precise elevon control, an electronic speed controller (ESC), and a brushless motor.

Mahjong Computer Vision

- Developing a convolutional neural network (CNN) in Python aimed at recognizing tiles and streamlining the Hong Kong scoring process for Mahjong tournament procedures.
- Programmed a image preprocessing/normalizing algorithm with OpenCV to reduce noise and increase model accuracy.

Involvement/Interests

UGA Club Tennis, IEEE, AIAA, Hiking, Fitness, Traveling, Video Editing, UI/UX Design