Wesley Hu

wesleyjhu14@gmail.com | 703 640 4731 | website.wessite.download | linkedin.com/in/WesleyJHu | github.com/weswes2EPYC | US Citizen

Education

Georgia Institute of Technology, *B.S. in Computer Science*, Concentrations in Information Internetworks and Intelligence, Minor in Robotics   Aug 2023 – Present
- **Status:** Third Year
- **GPA:** 3.94/4.0
- **Relevant Coursework:** Algorithms, Linear Algebra with Abstract Vector Spaces, Databases, Perception, Machine Learning, Probability and Statistics, Computer Systems and Networks

Experience

Software Engineering Intern, MITRE – McLean, VA   Jun 2025 - Present
- Developed low-cost, attritable autonomous unmanned systems with unmanned ground vehicles (UGVs) to address capability gaps for US military and law enforcement.
- Architected and built the full autonomy stack, integrating vision language models (VLMs), agentic RAG pipelines, and object detection models into a post-mission processing pipeline.
- Designed and implemented satellite-based navigation: obstacle detection from imagery, real-time GUI editing, and dynamic path planning in partially observable environments.
- Engineered unmanned vehicles and edge computing platforms from the ground up. Integrated edge autonomy across the unmanned system network; conducted live field testing and demonstrations.

CS2340 Objects and Design UTA, Georgia Tech – Atlanta, GA   Jan 2025 - Present
- As the UTA of CS2340, I help students learn how to work in team environments as software engineers.
- Guided teams with Agile methodologies and DevSecOps, enabling effective CI/CD implementation with Jira and Git.

Software Engineer, Experimental Flights VIP – Georgia Tech   Jan 2024 - May 2024
- Worked in the Inventory Management sub-team researching the usage of drones for inventory management.
- Built Python scripts to connect multiple Tello drones via a central Raspberry Pi, enabling manual navigation and video streaming with UDP, MAVLink, and Ardupilot
- Implemented basic flight paths and automatic QR/barcode scanning to enable autonomous and accurate inventory logging in warehouses.

Projects

Agiler, AI ATL Hackathon   devpost.com/software/projo Dec 2024
- Built a project management tool that uses LLMs to analyze meeting notes and recordings to automatically update and create user stories and tasks in the backlog whenever necessary. Our tool enforces good project management practices and cuts down on manual busy-work.
- We used React, FastAPI, Python, Gemini API, Claude API, Docker, and GCR to build and deploy in two days.

foodr   foodr.pythonanywhere.com Oct 2024
- foodr is a Django web-app that allowed users to easily find and save nearby restaurants.
- My team and I utilized Scrum where I acted as the Product Owner setting product vision and strategy.
- I designed a custom-skinned Google Maps API and implemented a search through the Google Places API.

Cipher AI   cipherai.dev July 2023
- Cipher AI is an AI-assisted Leetcode-styled interview prep web-app through Buildspace Season 5.
- The built-in AI chatbot can give hints, ask follow-up interview questions, and suggest different problems depending on what the user struggles with.

Automated Real-Time Stock-Market Analyzer   Oct 2024
- Enabled a net portfolio gain of **+24%** from January to April 2025 despite a period of poor global market performance.
- Originally developed in 2021, a recent 2024 system redesign added automated scheduling, alert mailing, and implemented a new pattern recognition algorithm.

Technologies

Languages: Python, Java, Node.js, React.js, Next.js, TypeScript, HTML, CSS, Tailwind CSS, C, C++, Assembly, SQL/noSQL Databases

AI/ML: CNN, LLM, VLM, OpenCV, TensorFlow, PyTorch, Hugging Face, SkLearn, Numpy, Pandas, CUDA, Agentic AI (LangChain and LangGraph), RAG Pipeline Design, Reinforcement Learning, Edge Computing, Vector Stores

Software/Tooling: Docker, WSL/Linux, Redis, FastAPI, MAVLink, Figma, Ardupilot

Cloud CI/CD Platform: AWS, Cloudflare, GCP, GCR, Git, Jira, Confluence, Git Actions

Hardware: Breadboard, Soldering, Arduino, Raspberry Pi, UAV, UGV, Computational Hardware, CAD