Emily C. Liew

eliew3@gatech.edu | linkedin.com/in/emilyliew | github.com/emilyy-liew | emily-liew-portfolio.vercel.app

Education

Georgia Institute of Technology | Atlanta, GA *August 2022 – May 2025*
Bachelor of Science in Computer Science, Threads: Information Internetworks and Intelligence, GPA: 3.9
Coursework: Data Structures and Algorithms, Systems and Networks, Design and Analysis-Algorithms

Skills

Programming Languages: Java, JavaScript/JSX, Python, C, Assembly
Technologies: Next.js**,** React, HTML, CSS, REST API, AWS, GitHub, JUnit, Docker, Android Studio
Languages: English (native), Cantonese (conversational), Mandarin (Seal of Biliteracy - fluent)

Experience

Intro to Object-Oriented Programming in Java | Georgia Institute of Technology *January 2023 – December 2023*
Teaching Assistant Atlanta, Georgia
- Worked 10+ hours a week teaching recitation, grading assignments, and hosting office hours.
- Used **JUnit Testing Framework** to write test cases to automatically grade students' work.

NJ Governor's School of Engineering and Technology *June 2021 – July 2021*
Researcher New Brunswick, New Jersey
- Researched **artificial intelligence** and hand biometrics; collected data used to train 50+ AI models on **MATLAB**.
- Wrote a research paper using **LaTeX** and presented findings to 100+ professors at Rutgers University.
- Used **Python** to program robots to autonomously complete missions using sensors.

Projects

Bounce (Personal Project) **|** Next.js, React.js, TypeScript, AWS, HTML, CSS, REST API, Node.js *June 2023 - Present*
- Built a full-stack web app using **React**, **TypeScript**, and **AWS**, enabling users to track recipes, groceries, and tasks.
- Connected the front-end to a back-end database for persistent data storage using **Node.js, REST API,** and **AWS**.
- Implemented dynamic task categorization and prioritization based on deadlines and task duration.
- Implemented dynamic sorting of recipes that is updated based on the available ingredients in a user's inventory.

BetaBase, Create-X Female Founders Start-up *October 2022 - Present*
- Conducted customer discovery for start-up that aims to improve beta testing/product validation for other start-ups.
- Plan to develop MVP through Create-X Start-Up Launch Start-Up Accelerator program in the summer using **Figma**.

STEM 4 ALL (Personal Project) | HTML, CSS *June 2021 – June 2022*
- Designed a website using **HTML** and **CSS** to host EV3 robotics lessons, making STEM education more accessible.

Organizations

Chinese Student Association, *Co-President* | Georgia Institute of Technology *August 2022 – Present*
- Planned monthly event and presented at the monthly general body meeting.
- Managed/led subcommittees and planned a major event for 300+ students each semester, communicating with several vendors and organizations to accomplish this.

The Agency | Georgia Institute of Technology *August 2022 – Present*
- Attended weekly development workshops teaching the basics of machine learning using **Python**.
- Learned about and created neural networks and computer vision models using **Python** in Jupyter Notebook.

Society of Women Engineers | Georgia Tech *August 2022 – Present*
- Attended professional development workshops to build communication skills.

Publications

Robustness Testing of Artificial Intelligence-Driven Hand Biometric-Based User Authentication in Mobile Devices
(1) https://ieeexplore.ieee.org/document/9701620
(2) https://engineering.rutgers.edu/governors-school-engineering-technology-research-journals
- Concluded hand biometric-based phone authentication is too unreliable with current technology and our AI models.
- Published in **IEEE** *Xplore* and presented at **2021 MIT Undergraduate Research Technology Conference (URTC).**
- Published in 2021 Governor's School of New Jersey Program in Engineering & Technology Research Journals.