Allen Yu

US Citizen | jallenyu33@gmail.com | jallenyu.com | github.com/jallenyu

Education

Georgia Institute of Technology, MS in Computer Science   **Expected: Dec 2025**

- <u>Relevant Coursework:</u> Graduate Algorithms, Software Development Processes, Operating Systems, Database Systems, Information Security, Computer Networks, Human-Computer Interaction

Projects

Cosmic Crusaders   Demo

- Collaborated with a team of 6 to design and develop a Unity space-shooter with AI-driven enemies
- Reduced CPU usage by 73% by implementing object pooling to cut object allocations and clean up overhead
- Built an in-game shop system to handle purchases and unlockable upgrades
- Led playtesting and qualitative research to iterate on core mechanics and game balance

Report Tracker   Demo

- Built a report management React app to help environmental companies in handling 600+ reports
- Implemented CRUD REST APIs with Java (Spring Boot, Hibernate) to manage reports in the PostgreSQL relational database; secured endpoints via JWT authentication
- Dockerized the backend service and deployed on AWS EC2

Tune Snip   Demo

- Built a music recognition app indexing 18M+ songs, achieved 95% detection accuracy
- Engineered a RESTful Flask API and used multithreading to cut response time by 44%
- Dockerized the backend and deployed to Google Cloud Run

Experience

Back of House Staff, Sunright Tea Studio – Seattle, WA   Mar 2024 – Present

- Stocked teas, fruits, and toppings during peak shifts, coordinating with a 20-person team to prevent shortages and reduce waste
- Collaborated with front-of-house to streamline orders and shorten customer wait times
- Conducted regular inventory checks and restocked supplies to maintain smooth operations

Technical Skills

Languages: Python, Java, JavaScript/TypeScript, HTML, CSS, C, C++, C#, SQL
Frameworks & Libraries: React, Flask, Spring Boot, Hibernate
Tools: Git, Docker, PostgreSQL, MongoDB, AWS, GCP