

Alan Wang

aw2755@rit.edu | linkedin.com/in/wang-alan | github.com/aw2755 | aw2755.github.io/alan_wang

EDUCATION

Rochester Institute of Technology

Rochester, NY

Bachelor of Science in Computer Science(GPA 3.54)

Expected May 2026

- **Relevant Coursework:** Computer Science I&II (Python, Java), Mechanics of Programming (C), Data structures and Algorithms (PostgreSQL), Intro to Software Engineering (HTML/CSS, React), Distributed Systems (C#), Intro to AI (Python), Intro to Computer Graphics (JavaScript), Database System Implementation (Java)

TECHNICAL SKILLS

Languages: Python, Java, C++, JavaScript, TypeScript, HTML, CSS

Frameworks: React, Node.js, Express.js, JUnit, Pytest

Developer Tools: Git, Postman, Docker, PostgreSQL, MongoDB, AWS

Concepts: Back-End Development, Front-End Development, Software Engineering, Agile, version control, Full Stack Web Developer, Object-Oriented Design, Databases, Testing, Documentation

EXPERIENCE

Georgia Tech Research Institute

Aug. 2024 – Present

Software Engineer Intern

Huntsville, AL

- Configured **Docker** containers as part of a **CI/CD** pipeline to increase development build speed by 9 minutes.
- Resolved 300+ **Fortify** vulnerabilities with **C++** to optimize application security, support regulatory compliance.
- Supported release branch maintenance by conducting code reviews, ensuring stability, high-quality deployments.

Georgia Tech Research Institute

Aug. 2023 – Dec. 2023

Software Engineer Intern

Huntsville, AL

- Effectively developed and maintained **automation** test scripts with **Pytest** to ensure a **80%** code accuracy.
- Modernized web components using **Node.js** to enhance user experience and increasing application performance.
- Implemented new **IBCS** functionalities that provides real time sensor data which enhanced decision making.

Rochester Institute of Technology

Jan. 2023 – May 2023

Software Course Assistant (GCIS-124)

Rochester, NY

- Collaborated with a professor to deliver course materials and facilitate an introductory **Java** class of 30 students.
- Assisted first-year students by **troubleshooting** code, leading to an improvement in assignment completion rates.
- Boosted student performance through targeted feedback on Software Engineering processes student performance.

PROJECTS

Inventory Manager | *PostgreSQL, Next.js, React, Node.js, AWS, TypeScript, TailwindCSS, HTML*

- Programmed a full-stack web application with **CRUD** functionalities, **AWS RDS** for relational data handling.
- Deployed using **AWS EC2** instances for hosting backend services, and **AWS S3** for secure file and image storage.

Bookstagram | *MongoDB, Express, React, Node.js, GoogleAPI*

- Developed a scalable social platform with **MERN**, delivering seamless user experiences with responsive designs.
- Utilized the Mongoose library to store books/user schema into **MongoDB** using **SHA-512** encrypted passwords.

ClubMate | *Python, Discord.py*

- Leveraged **Discord API** to implement embedded messages, enhancing user interaction and engagement.
- Integrated real-time update capabilities providing live event alerts leading to improved information accessibility.

BrickSQL | *Python, PostgreSQL, Pytest*

- Designed SQL databases for an **CLI** program, improving query performance by **15%** and ensuring data integrity.
- Crafted and executed **SQL** queries enabling personalized movie recommendations by using various analytic.

Fruit E-Store | *Java, Spring Boot, Angular, Typescript, JUnit*

- Built an E-store web application using **REST API** and **MVVM** architecture with **agile methodologies**.
- Implemented comprehensive **JUnit** test scripts, attaining a **95% code coverage** rate, enhancing reliability.