Wei Lu

weiqlu@vt.edu | weiqlu.dev | github.com/weiqlu | linkedin.com/in/weiqlu | +1 (757) 761-7420

EDUCATION

Virginia Tech **Expected Dec 2025**
Bachelor of Science in Computer Science, **GPA: 3.80/4.00** Blacksburg, VA

EXPERIENCE

Software Engineer Intern, Full Stack Jun 2025 – Present
Investure Charlottesville, VA

- Developed a multi-agent pipeline with the OpenAI API to extract structured financial data with 99% accuracy, reducing processing time from hours to minutes and replacing a third-party vendor, saving $70K+ per quarter.
- Developed a React UI for the pipeline, allowing analysts to upload documents and instantly view structured outputs, eliminating the need to send documents to third-party vendors.
- Optimized model prompts and used pytest with historical data to handle edge cases and ensure reliable extraction.
- Collaborated in an Agile environment to deliver improvements and incorporate feedback in weekly sprints.

Undergraduate Teaching Assistant May 2024 – Present
Virginia Tech Department of Computer Science Blacksburg, VA

- Held weekly office hours to support 400+ students in Data Structures & Algorithms (Java) and Database Management Systems, answering questions on assignments, projects, and core concepts.
- Resolved 25+ questions weekly, providing guidance on algorithm analysis, SQL query debugging, and project implementation to improve student understanding and performance.
- Collaborated with course instructors to address common misconceptions and recurring student challenges.

Student Hiring Administrator Mar 2024 – Jun 2025
Virginia Tech Dining Services Blacksburg, VA

- Coordinated hiring with an 8-person team, processing applications for 1,000+ student employees each semester.
- Automated applicant processing with Microsoft Power Automate, reducing manual entry time by 5+ minutes per applicant and accelerating offer turnaround.

PROJECTS

HokieTracker | React, FastAPI, PostgreSQL

- Enabled 12+ students to secure high-demand courses faster than paid alternatives by building a real-time monitoring system that detected seat availability changes in under 3 seconds.
- Developed a mobile-friendly React UI with push notifications, eliminating manual page refreshes and providing instant alerts when seats opened.

EduGrade | React, Express, Node.js, MySQL

- Helped students make more informed scheduling decisions by creating a centralized platform that combined official grade distributions with anonymous course reviews across 20,000+ courses.
- Developed REST APIs for real-time data, full-text search, and filtering by course, instructor, and department.

Threadpool | C, POSIX Threads

- Built a work-stealing fork/join threadpool with per-worker deques and a global submission queue, and implemented helping semantics to avoid deadlocks when resolving futures.
- Eliminated data races and memory leaks through iterative testing with Helgrind and Valgrind, ensuring clean shutdown and memory management.

TECHNICAL SKILLS

Languages: Python, Java, C, JavaScript/TypeScript, SQL, Kotlin
Frameworks & Libraries: React, Node.js, Express, FastAPI, Jest, Pytest
Databases: MySQL, PostgreSQL, SQL Server
Developer Tools: Git, Docker, AWS (RDS), Azure DevOps, Android Studio