Wei Lu

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EDUCATION

Virginia Tech　　　　　　　　　　　　　　　　　　　　　　　　**Aug 2022 – Dec 2025**

Bachelor of Science in Computer Science, **GPA: 3.75/4.00**　　　　　　　　　Blacksburg, VA

Certifications

- AWS Certified Cloud Practitioner (Jan 2025)

EXPERIENCE

Software Engineer Intern　　　　　　　　　　　　　　　　　　　　May 2025 – Dec 2025

Investure　　　　　　　　　　　　　　　　　　　　　　　　　　　Charlottesville, VA

- Developed an AI-powered ETL pipeline in Python with OpenAI API, FastAPI, and SQLAlchemy, automating document extraction, reducing processing time from hours to minutes while saving $70K+ per quarter.
- Built a multi-run validation and majority-vote reconciliation workflow using redundant extractions to resolve cross-field inconsistencies, increasing accuracy from 92% to 99% across a diverse set of test documents.
- Designed a React portal to manage and visualize structured outputs, removing reliance on a third-party vendor.
- Optimized model prompts by iterating on historical data with pytest to improve accuracy and handle edge cases.
- Collaborated in Agile sprints to deliver iterative pipeline improvements based on analyst feedback.

Undergraduate Teaching Assistant　　　　　　　　　　　　　　　　May 2024 – Dec 2025

Virginia Tech Department of Computer Science　　　　　　　　　　　　　Blacksburg, VA

- Supported over 400 students in Data Structures & Algorithms (Java) and Database Management Systems through weekly office hours, answering questions on assignments, projects, and core concepts.
- Addressed 25+ weekly questions on algorithm design, SQL debugging, and project implementation, improving comprehension and course performance.

Student Hiring Administrator　　　　　　　　　　　　　　　　　　Mar 2024 – May 2025

Virginia Tech Dining Services　　　　　　　　　　　　　　　　　　　Blacksburg, VA

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

PROJECTS

HokieTracker | React, FastAPI, PostgreSQL

- Built a real-time course monitoring system detecting seat availability changes within 3 seconds, helping 12+ students secure high-demand classes faster than paid tools.
- Designed mobile-friendly React UI with push notifications, replacing manual refreshes with instant seat alerts.

EduGrade | React, Express, Node.js, MySQL

- Supported students in making 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.

weiqlu.dev | React, AWS (S3, CloudFront), GitHub Actions

- Implemented an automated CI/CD pipeline with GitHub Actions to deploy a React portfolio site to S3 and CloudFront, enabling HTTPS-secured, globally cached static content.

TECHNICAL SKILLS

Languages: Python, JavaScript/TypeScript, Java, SQL
Frameworks & Libraries: React, Node.js, FastAPI, Express, Spring Boot, Jest, Pytest, JUnit
Databases: PostgreSQL, MySQL, SQL Server
Tools: Linux, Git, GitHub, Docker, AWS, Azure DevOps