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

EXPERIENCE

Software Engineer Intern   Aug 2025 – Present
Investure   Remote

- Extended the LLM-based extraction pipeline with a multi-run validation framework to detect cross-field inconsistencies, surfacing errors earlier and improving data reliability.
- Designed a majority-vote reconciliation workflow with confirmation passes, resolving mismatches and raising accuracy from 92% to 99%, preparing the pipeline for production.
- Incorporated analyst feedback into the React UI, reducing document review time and improving usability.

Software Engineer Intern   May 2025 – Aug 2025
Investure   Charlottesville, VA

- Built an AI-powered ETL pipeline in Python with OpenAI API, FastAPI, and SQLAlchemy, automating document extraction at 92% accuracy and cutting processing time from hours to minutes, saving $70K+ per quarter.
- Developed a React upload portal to manage structured outputs, removing reliance on a third-party vendor.
- Optimized model prompts and used pytest with historical data to handle edge cases and ensure reliability.
- Collaborated in Agile sprints, delivering iterative improvements and incorporating feedback into the pipeline.

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 and Power Apps, 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.

TECHNICAL SKILLS

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