Jason Lu

jasonxlu.dev@gmail.com | (630) 802-6386

lujason.com | linkedin.com/in/jasonxlu | github.com/jasonxlu

EDUCATION

Northwestern University — Evanston, IL

B.S. and M.S. in Computer Science | Minor in Data Science and Engineering — *Expected June 2025*

- GPA: **3.81/4.00**, **Dean's List Honors** (**7 of 9 quarters**)
- Coursework: Computer Networks, Distributed Systems, Data Engineering, Scalable Architectures, Operating Systems

EXPERIENCE

Software Engineer Intern — Jun. 2024 – Aug. 2024

Capital One — *Dallas, TX*

- Spearheaded a self-service application **developed from scratch** in Angular and Golang to **process 65 million** weekly asynchronous events on external event gateway platform built for auto-finance
- Integrated **automated end-to-end testing** encapsulating enterprise API micro-services built using Java Spring Boot resulting in a **production ready application** serving internal stakeholders real-time status updates
- Initiated development of manual process execution to **reprocess thousands of failed events** caused by potential cybersecurity incidents from external partners

Software Engineer — Sept. 2023 – Present

The Garage at Northwestern — *Evanston, IL*

- Establishing an entrepreneurship platform for **250+ students** as the lead engineer of an agile product team
- Deployed and integrated APIs and back-end infrastructure leveraging **AWS and Vercel**'s cloud resources
- Conducted code reviews and mentored junior engineer in full-stack development practices with **scalable services**

Undergraduate Teaching Assistant — Mar 2023. – Present

Northwestern University — *Evanston, IL*

- Supported **400+ students** spanning three distinct courses: Introduction to Computer Systems (CS213), Fundamentals of Data Engineering (DE200), and Scalable Software Architectures (CS310)
- Facilitated learning by delivering clear explanations on course concepts, conducting regular office hours, and evaluating student progress through the assessment of assignments and examinations.

Data Scientist Intern — Jun. 2023 – Aug. 2023

Defense Counterintelligence and Security Agency — *Quantico, VA*

- Formulated integration of **robotic process automation** within National Industrial Security System cloud processes to streamline data form population resulting in **15 minutes saved** per operation
- Enhanced PM team's **agile software development** environment by building secure knowledge hubs in Confluence/Jira to support assessment and mitigation of risk to the DoD National Industrial Security System

Technical Project Lead — Mar. 2022 – Jun. 2023

Northwestern Financial Technologies Club, NUFT — *Evanston, IL*

- Served as leadership to **6+ technical teams** to develop multifaceted quantitative trading platform from scratch
- Established workflows for metadata processing team and organized weekly meetings for **10+ developers**
- Managed organization recruitment for fall 2022 attracting over **295 student researchers and developers**

RESEARCH PROJECTS

Distributed Micro-controller Communication | *Rust, C, Tock OS* — Sept. 2023 – Mar. 2024

- Conducted research under Professor Branden Ghena to develop low-level embedded communication protocol
- Utilized Rust to develop drivers and **kernel-level** features that facilitate application and operating system communication between resource-scarce embedded devices forming a basic **distributed system**
- Enabled resource sharing across Tock OS powered nordic micro-controllers strictly over wired UART connections

SKILLS AND QUALIFICATIONS

Languages: Python, C++, SQL, JavaScript/TypeScript, C, Go, Java, Spring Boot Rust, ARM-32/x86-64 Assembly
Development Tools: Git, AWS (Lambda, RDS, API Gateway, S3, EC2, DynamoDB), UNIX, Jira, Tableau, Figma
Frameworks/Packages: React, Angular, Pandas, NumPy, React Native, WordPress, Lean Six Sigma (Yellow Belt)
U.S. Security Clearance: Secret (Apr 2023 - September 2023), Inactive