Stephen Kelman

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Experience

Microsoft **Jan 2025 - Present**

Software Engineer

- Eliminated 95% of manual infrastructure maintenance by converting deployments to a region-agnostic framework, allowing pipelines to be configured efficiently while deploying to 8+ environments across 58+ Azure regions.

Everlaw **Jul 2024 - Jan 2025**

Software Engineer

- Improved regression model accuracy by 20% for >1,000 customers, by updating the training (Java, Spring, SQL), to allow models to ignore corpus changes that had been measured as worsening model performance in past updates.
- Boosted productivity for 100+ engineers, helping kick off frontend improvement and unit testing initiatives by converting plain TypeScript files to React and writing full-coverage unit testing (JUnit5, Mockito) for my features.

Amazon Web Services **Jun 2023 - Sep 2023**

Software Engineer Intern – Network Security

- Reduced manual data analysis by 90% for AWS's largest & most data-intensive processing service by designing a cross-regional system of AWS Lambdas (Python, TypeScript) to monitor and flag system stats and events.
- Provided crucial analytics for 60+ AWS security teams using our platform, including query efficiency & event filtration rate across all datasets, by developing a set of interactive dashboards written in TypeScript, with AWS CloudWatch.

Amazon Web Services **Jun 2022 - Sep 2022**

Software Engineer Intern – Network Security

- Saved 500+ hours per year for threat response teams by building a network forensics tool using AWS Lambdas (Python) to analyze network and host-based security events from AWS S3 and Athena, and notify teams of suspicious events.
- Reduced external dependencies by 30% across my team's division, by discovering new internal network scanning tools and fixing bugs in network data APIs, which enabled critical resources to be consolidated into our division.

Education

University of California, Los Angeles **Sep 2020 - Jun 2024**

B.S. Computer Science, B.S. Mathematics *Los Angeles, CA*

- **GPA: 3.993**, Summa Cum Laude, Phi Beta Kappa, Upsilon Pi Epsilon (Honor Society for Computer Science)
- **Relevant Coursework:** Data Structures & Algorithms, Networks, Data Management Systems, Machine Learning

President @ ACM Cybersecurity, UCLA **Nov 2020 - Mar 2023**

- Managed a 20-person team in designing workshops and CTF challenges, teaching 100+ students about exploiting common security vulnerabilities in binary executables, web apps, networks, and cryptographic protocols.
- Led training and development for club infrastructure, including a new React website.
- Created a projects track for 15 teams to learn about modern cybersecurity issues like finding vulnerabilities in interpreted languages; attacker tactics, techniques, and procedures; and threats to enterprise, cloud, and distributed systems.

Projects

C++ Web Server **Jan 2024 - Jun 2024**

- Developed web server to host & process markdown and other static files for 200 classmates, with a JavaScript frontend webpage, and a multi-threaded C++ backend, using a factory-based builder pattern to manage HTTP requests.
- Maintained 90% test coverage by writing 100+ unit and integration tests using the GTest library for C++.
- Enabled another team of 4 students to contribute their own servlet, for handling managing JSON, to our infrastructure by managing a flexible and intuitive API, loosely based on NGINX.

Technical Skills

Languages: Python, Java, C++, SQL, Rust, C#, Go, C, Bash, PHP, Typescript, Node.js, React
Technical Tools: Linux/Unix, Git, AWS, Docker, GTest, NGINX, Gradle, Java Spring, JUnit5, Jest, PyTest, Azure