

PROFILE

Software engineer proficient in Java, Python, Swift, TypeScript, and C/C++. Passionate about developing efficient and reliable software solutions to help companies grow, teaching rising developers new skills, and working on new, cutting-edge technologies.

Work Authorization Requirements : None - I am a US Citizen

EDUCATION

Purdue University, West Lafayette, IN — Bachelor's of Science in Computer Science (May 2022)
Amazon AWS Solutions Architect Certificate — In Progress - to be completed by December 2024

EXPERIENCE

Software Engineer, Product at Striim; Palo Alto, CA + Remote July 2023 - March 2024

- Accelerated product-led growth by building a number of micro-services, such as a downtime detection system and a analytics pipeline.
- Created data pipelines and analytics tools using Snowplow and GCP to identify and analyze data.
- Maintained an interaction analytics system with Terraform to correctly connect various GCP resources.
- Developed a SlackBot-integrated alert system similar to PagerDuty for services failing or shutting down, using Python and Boto3 for interacting with AWS, resulting in the company saving approximately \$300K annually.
- Implemented a Python solution to interact with the SlackBot service and alert when customer-side nodes spun down, saving ~2-3 days of customer downtime.

Software Engineer, Billing Operations at Twilio; San Francisco, CA July 2022 - February 2023

- Driving analysis and understanding of customer data flow through a Kafka pipeline, collaborating with cross-functional product teams to optimize the customer experience workflow using Java 8.
- Used Datadog to visualize and graph customer product usage trends for the entire Twilio Core engineering and product teams to consume.
- Followed and performed Agile and Scrum processes such as daily standup meetings, sprint planning, backlog grooming, and meetings with product teams to help inform billing pipeline task prioritization.
- Optimized ingestion pipeline code to merge and persist similar billing events using Spring JPA, resulting in a cost savings of up to \$10M annually.
- Worked on user-facing projects in Spring Boot while incorporating Amazon SQS to ingest data streams as an alternative to Kafka.
- Mentored interns in onboarding tasks, tool usage, and deployment processes, while introducing them to the team core tech stack.
- Instrumented applications with New Relic to monitor performance, identify bottlenecks, and ensure system reliability in development and production environments.

CS18000 Head Teaching Assistant at Purdue University; West Lafayette, IN May 2021 - June 2022

- Collaborated closely with core course faculty to develop assignments, ensure accessibility for over 700 students, deliver weekly lectures, and provide ongoing support throughout the semester.
- Lead students through a comprehensive Java programming curriculum using the latest Java version, covering fundamental concepts such as data types, progressing seamlessly to advanced topics like file input and output, and concluding with dynamic data structures including Lists, Trees, and Recursion.
- Created assignments using a custom JUnit Framework that utilized reflection and Mockito and Cucumber to make sure that variations on student's code met the assignment guidelines.

Software Engineering Intern at Genesys; Remote June - August (2020 + 2021)

- Designed and implemented a robust API endpoint security system in Java, ensuring adherence to company standards for both inbound and outbound API access, and developed an internal-facing tool for scanning endpoints to help engineers identify the endpoints and respective teams they interacted with.
- Contributed to the endpoint scanner project during the subsequent summer (2021) and mentored a first-year intern, guiding them through the team's tools and technologies.

TECH STACK PROFICIENCY

Redis, Spring Boot, Amazon SQS, Abacus, Hadoop, Buildkite, Datadog, Spark, Snowplow, Snowflake, Spark, DynamoDB, Terraform, Docker, Kubernetes, AWS (ECR, ECS, CloudWatch, EventBridge), GCP (BigQuery, Compute Engine, GKE and Looker), Firebase, NoSQL, SQL, Llama3, Combine, Flask, Vercel

PERSONAL PROJECTS

Social + FratPak
Co-founded an LLC focused on developing a mobile application using SwiftUI, Firebase, and JavaScript to cater to student communities, featuring functionalities such as event attendance tracking, guest management, and safety enhancement, successfully addressing privacy concerns during marketing to colleges, and ensuring its continued presence on the iOS App Store, serving as a compelling portfolio asset.

Journey
Developing a social media mobile app using a custom large-language model developed with Llama3 and a self-curated dataset to recommend travel destinations by analyzing user interactions with friends' posts and reviews, with plans to launch by the end of 2024

OpenAI Text Lookup
Developed and deployed a Flask-based application running on Vercel that allows a user to upload a file and define a selected portion of text.

Java Test Builder
Developed a Java framework to simplify test case writing and improve test portability with JUnit, gaining experience in Java and JUnit, and understanding the importance of test case writing for ensuring software quality.

XKDB Builder
Engineered a build tool to set up a GDB debugging session for XINU (a small, elegant OS for embedded systems which lacks a default GDB debugger) by injecting the debugger into the codebase, enabling standard GDB debugging on the XINU remote server.