

EXPERIENCE

P-1 AI , Remote <i>Lead Software Engineer</i> - Designed and led development of a BYOC (bring-your-own-cloud) platform that deploys Archie, P-1’s engineering AI agent, into customer cloud environments; a composable architecture assembles each deployment from modular, independently versioned components. - Architected a plugin-based capabilities framework that lets teams build and ship new tools, integrations, skills, and datasets independently of the core platform; own its roadmap. - Developed the dataset pipeline packaging raw data into content-addressed OCI artifacts through pluggable sources (e.g., HuggingFace), transforms, and sinks, orchestrated on Kubernetes by a custom CRD and controller. - Created a zero-trust gateway implementing a phantom-token pattern: agent-written code running in ephemeral sandboxes holds only opaque, request-scoped tokens while the gateway holds all credentials and enforces authentication, authorization, scoping, and rate limits. - Built the observability foundation: OpenTelemetry instrumentation across all services feeding a self-managed Grafana LGTM stack for unified logs, metrics, and traces, with alerting and on-call tooling.	Aug 2025 – Present
Amazon , Arlington, VA <i>Software Engineer</i> - Proposed, designed, and led the build of a real-time duplicate-invoice detection service (up to 500 TPS bursts) with pluggable rule-based and ML engines, strengthening a fraud-prevention suite that blocks more than \$1 billion annually; runs on Lambda, SageMaker, and OpenSearch. - Built an EU-compliance ingestion pipeline on AWS Fargate, SNS/SQS, and Lambda that processes approximately 1 billion book titles per year, extracting required metadata, storing compliance artifacts, and scaling to 500 TPS with comprehensive tests and monitoring. - Created graph-analysis tooling that mapped 14,000 legacy catalog rules and produced topologically sorted deprecation plans for product managers.	Apr 2024 – Aug 2025
Ampla Technologies , New York, NY <i>Senior Software Engineer II (Jan 2024 – Apr 2024)</i> - Delivered an automated underwriting workflow that scales credit operations, logs auditable actions, and enforces fraud and covenant controls. <i>Senior Software Engineer I (Jan 2023 – Dec 2023)</i> - Built a framework that auto-generates Excel models with embedded audit trails, cutting underwriting time by roughly 30%. - Re-implemented the transaction-tagging engine in Python with the Aho-Corasick algorithm, reducing runtime from hours to 90 seconds. <i>Software Engineer II (Mar 2022 – Dec 2022)</i>	Mar 2022 – Apr 2024
BlackRock , New York, NY <i>Associate Software Engineer (Jan 2021 – Mar 2022)</i> - Built a distributed map-reduce portfolio-construction platform handling 100x the previous load. - Led the design and implementation of a gRPC service requiring coordination across multiple teams. - Architected a metrics-tracking service and mentored three interns developing the server and client. <i>Analyst Software Engineer (Sep 2020 – Dec 2020)</i> <i>Rotational Analyst Software Engineer, San Francisco, CA (Jul 2018 – Aug 2020)</i> - Developed a Python library giving fixed-income researchers efficient access to NLP analytics on Apache Spark, improving runtime by 15–20%. <i>Summer Analyst Software Engineer, San Francisco, CA (Summer 2017)</i>	Summer 2017; Jul 2018 – Mar 2022
Workday , Pleasanton, CA <i>Software Engineering Intern</i>	Summer 2016

EDUCATION

Georgia Institute of Technology, College of Computing, Atlanta, GA
Master of Science in Computer Science; GPA: 4.0
University of Michigan, College of Engineering, Ann Arbor, MI
Bachelor of Science in Engineering in Computer Science, Minor in Mathematics; GPA: 3.375

PROGRAMMING SKILLS

Languages: Python, Go, TypeScript, Kotlin, Java, Rust, C++
Technologies: Kubernetes (operators/CRDs), Terraform, GCP, AWS, Docker, OpenTelemetry, LangGraph/LangSmith

ADDITIONAL CREDENTIALS AND ACCOMPLISHMENTS

NSA Codebreaker Challenge Finisher (2023) <i>One of 24 finishers out of more than 3,300 participants.</i>	Dec 2023
Chartered Financial Analyst (CFA) Charterholder	Aug 2021