SKILLS

- Languages: Python, Go, JavaScript, TypeScript, Java, SQL
- Frameworks: Next.js, React.js, Node.js, Express.js, Angular.js, Flask, Cypress, TailwindCSS
- Architecture: Distributed Systems, Microservices, Event-Driven Architecture, Cloud-Native Applications, Observability
- Tools: Git, Docker, Kubernetes, Kafka, Instana, LogDNA, Redis, Neo4J, LLMs
 - Cloud Services: AWS (EC2, S3, Lambda, SageMaker), GCP (Compute Engine, Cloud Run, BigQuery), IBM Cloud, OpenShift
- Other Tools: Kafka, Redis, WatsonX.ai, PromQL, Cypress, Skupper, Prometheus, Thanos, Grafana, RAG-based AI
- Certifications: IBM Enterprise Design Thinking Practitioner | IBM Blockchain Essentials | IBM Developer Jumpstart

WORK EXPERIENCE

IBM Software Engineer Aug 2023 - Current
Research Triangle Park, NC

Hybrid Cloud Mesh Team

- Designed and launched an AI-infused Retrieval-Augmented Generation (RAG) chatbot using IBM WatsonX.ai including custom
 vector search over Hybrid Cloud Mesh documentation, providing engineers with contextual, conversational troubleshooting
 assistance and accelerating issue resolution.
- Developed and refined observability microservices for <u>Hybrid Cloud Mesh</u>, integrating **Prometheus** and **Thanos** for large-scale metric ingestion, long-term storage, and real-time insights. These metrics are enriched with product specific data enabling a contextual, unified topological view of mesh resources across on-prem and multi-cloud environments via **Skupper**.
- Configured and managed Prometheus agents for remote writing metrics to middleware, establishing the flow log pipelines from
 metric scraping to enrichment up until long-term storage in Thanos, with Grafana used for visualizing these queries.
- Increased code coverage of observability microservices to 80% and wrote end-to-end tests for durability and integration testing, ensuring robust and reliable performance before general availability (GA) release.

IBM May 2022 - Sep 2022

Software Engineer Intern

Cloud Expert Labs Team

Remote

- Designed and implemented secure, branded login pages using TypeScript, Next.js, and Node.js, integrating with IBM Cloud services
 and adhering to IBM Carbon Design standards to enhance user authentication and security
- Implemented secure REST APIs with Express, enabling end to end user authentication flows, including password resets, email notifications, multi-factor authentication, adhering and enhancing to IBM system security standards
- Automated retailer onboarding workflows with Python, reducing manual data entry time by over 75%, improving operational efficiency and accelerating time-to-market for new clients
- Improved product reliability by developing and deploying Cypress E2E tests from scratch into our CI/CD pipeline, reducing deployment bugs and ensuring seamless delivery of new features.

Leidos June 2021 - Dec 2021

Software Engineer Intern Annex Intelligence Division Reston, VA

- Collaborated with the Annex Intelligence team to design, develop, and deploy web and mobile applications for the US NCTC, supporting critical counter-terrorism initiatives by enhancing operational capabilities and data accessibility
- Developed key features for web portals using Vue.js, Node.js, ElasticSearch, and S3, improving data processing efficiency and enhancing the user experience for intelligence analysts.
- Streamlined CI/CD pipelines using Docker, GitLab, and SonarQube, reducing build and deployment times by 30% and enhancing software quality through automated API testing and integration with Postman.
- Led cross-functional integration efforts, coordinating with various teams to ensure seamless application deployment, resulting in improved operational efficiency for national security efforts.

RECENT PROJECTS

YTRecap Github March 2023

YTRecap.org is a web app built using Python Flask that can summarize any YouTube video by parsing the video for its closed captions and passing them to an NLP large language model

Peerfolio Github June 2025

<u>Peerfolio.org</u> is a social investment platform in development that integrates with Plaid to aggregate brokerage accounts, enabling users to track portfolios, compare with friends, and explore investing trends.

EDUCATION

University of Pittsburgh Bachelor of Computer Science May 2023

Pittsburgh, PA

Coursework: Algorithmic Implementation, Data Structures, Discrete Structures, Assembly Language, Intermediate Programming, Computer Organization, Software Engineering, Web-Development, Artificial Intelligence, Systems Software, Formal Methods in Computing, Operating System, Database Management Systems, Quality Assurance, Big Ideas in Computing Honors: Cum Laude