
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, Redis, Neo4J, Prometheus, Thanos, Grafana, PromQL, Skupper
- **Cloud Platforms:** AWS (EC2, S3, Lambda, SageMaker), GCP (Compute Engine, Cloud Run, BigQuery), IBM Cloud (OpenShift)
- **AI/ML:** OpenAI SDK, Claude Code SDK, WatsonX, LLMs, Retrieval-Augmented Generation (RAG)
- **Certifications:** [IBM Enterprise Design Thinking Practitioner](#) | [IBM Blockchain Essentials](#) | [IBM Developer Jumpstart](#)

WORK EXPERIENCE

IBM Aug 2023 - Current
Software Engineer Raleigh, NC

[Hybrid Cloud Mesh Team](#)

- Built and enhanced **observability** microservices integrating **Prometheus** and **Thanos** for large-scale metric ingestion, **enrichment**, and long-term storage, enabling real-time performance insights across **multi-cloud** and **on-prem** environments.
- Owned and configured **Prometheus** remote-write pipelines end-to-end -- from scraping to **middleware enrichment** to **Thanos** -- enabling a unified, **topology-aware** view of mesh resources via **Skupper**.
- Designed and built **PromMocker**, a full Prometheus remote-write mocker that simulates metric ingestion for multi-cloud Skupper mesh environments, eliminating the requirement to deploy real gateways for testing. PromTool automates resource creation and metric generation across tenants and is now used daily across engineering teams and integrated into QA pipelines as a default testing harness.
- Designed and deployed an **AI-powered RAG** chatbot using IBM WatsonX with custom **vector search** over internal Mesh documentation, improving troubleshooting speed and reducing time-to-resolution for both clients and engineering teams.

IBM May 2022 - Sep 2022
Software Engineer Intern Remote

[Cloud Expert Labs Team](#)

- Built secure authentication UIs using **TypeScript**, **Next.js**, and **Node.js**, integrated with IBM Cloud Identity and IBM Carbon Design.
- Implemented **REST APIs** with **Express**, enabling end to end user authentication flows, including MFA, password resets, and email-based login recovery.
- Automated retailer onboarding workflows with Python, reducing manual processing by **~75%** and accelerating customer onboarding.
- 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 Reston, VA

[Annex Intelligence Division](#)

- 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
- Improved backend performance and data retrieval lookup times by optimizing Elasticsearch indexing and query patterns
- 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.
- Created automated Postman-based API tests that increased integration reliability and improved quality across annex workflows.

RECENT PROJECTS

TinyOBS | [Github](#) Nov 2025
TinyOBS is an open-source, Go-based observability tool with an embeddable SDK, a Badger-backed datastore, and a real-time dashboard for endpoint-level performance metrics.

Peerfolio | [Github](#) Jun 2025
[Peerfolio.org](#) 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.

YTRecap | [Github](#) Mar 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

EDUCATION

University of Pittsburgh May 2023
Bachelor of Computer Science (Honors) 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