

EMPLOYMENT

Software Engineer **Oxen.ai** **May 2025 - present**

- VCS system for large datasets using rust.
- **Deduplication** for large files to increase commit overlap and diff in large blobs and data frames.
- My contributions to oxen FOSS cli and server can be found [here](#)

Senior Systems Engineer **NimbleEdge** **Jan 2023 - Feb 2024**

- **Led a team of 8 Engineers** on project execution and delivery.
- **Designed Software Systems with 100M MAU.** Systems I built were handling 20K requests per second at peak load. We did 50M inferences a day on EdgeML deployments.
- **Implemented Federated Learning (FL) Research such as FedAvg, Model Fine-tuning** in the edge, Client Selection Polling, Secure Aggregation, etc.papers into Deployable and maintainable applications.
- **Architected embedded edgeML SDK** built on top of Onnx runtime.

Software Development Engineer II **Skyflow** **Oct 2021 - Dec 2022**

- **Optimized the governance engine reducing p99 response time from 150 ms to 5ms at 15K RPS** by leveraging hierarchical caches and cache invalidation algorithms.
- **Redesigned control and data planes**, from a single tenant architecture to a multi-tenant architecture. With data residency across multiple regions. Which Reduced Server cost by 67% annually.
- **Migrated from an Arangodb based backend to Mongoddb**, with 80 Million records coming to about 1TB data, with zero downtime.

Platforms Engineer **Acko Insurance** **July 2019 - Oct 2021**

- **Built and maintained** Internal CICD platform for application release across android, mac,
- **Managed more than 300 Releases over a period of 7 months**, while maintaining zero down time in a monolithic rust codebase.
- **Collaborated across 9 teams** and migrated their services into a common platform. Improving SLAs across different Lines of Businesses.

EDUCATION

MS - Privacy Engineering **Carnegie Mellon University** **Aug 2023 - Dec 2024**

GPA 3.78/4, Coursework: Deep Learning, AI Governance, Browser Security, etc

BE - Instrumentation Engineering **Anna University** **April 2015 - April 2019**

GPA 3.9/4, Coursework: Control System, Digital Signal Processing, VLSI Design, etc

PROJECTS

Core Contributor **Speaksharp** **Mar 2024 - Present**

- Built speaksharp, a digital language and communication coach converting your personal daily conversations to learning opportunities, using Python, voice diarization, prompt engineering, etc.
- Top 5% for YC Summer '24 batch.

SKILLS

- Languages: **Rust, Golang, C++, Java, python, js**
- Tools/Frameworks: **Onnx, kafka, K8s, Docker, EKS, Azure, gRPC, AWS, react-native, Ray, Kotlin, Elasticsearch**

ACHIEVEMENTS AND PUBLICATIONS

- SPARK grant for Entrepreneurship, CMU '24
- Privacy Engineering Scholarship, CMU '23
- 7x Hackathon winner