

**EMPLOYMENT**

**Senior Systems Engineer**

**NimbleEdge**

**Jan 2023 - July 2023**

On-Device ML

- 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.
- Designed platforms with 100M MAU. Systems I built were handling 20K requests per second at peak load. We did 50M inferences a day on EdgeML deployments.
- Led Architecture decisions on embedded edgeML SDK built on top of Onnx runtime.
- Mentored Junior engineers and interns on deliverables and Goals.

**Software Development Engineer II**

**Skyflow**

**Oct 2021 - Dec 2022**

Governance Engine Team

- 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. Reducing Server cost by 67% annually.
- Migrated from an Arangodb based backend to MongoDB, with 80 Million records coming to about 1TB data, with zero downtime To improve reliability and performance.

**Platforms Engineer**

**Acko Insurance**

**July 2019 - Oct 2021**

Platforms Team

- Managed more than 300 Releases over a period of 7 months, while maintaining zero down time.
- Collaborated with 9 different 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, Prompt Engineering, AI Venture Studio, etc

**MTech - Software Engineering**

**BITS Pilani**

**Dec 2020 - Dec 2022**

GPA 3.9/4, Coursework: Distributed Systems, Database Design 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.io**

**Mar 2024 - Present**

- Built speaksharp.io, a digital language and communication coach converting your personal daily conversations to learning opportunities, using Python, voice diarization, prompt engineering, etc.
- Top 10% for YC Summer '24 batch.

**SKILLS**

- **Languages:** Rust, Golang, C++, Java, python, javascript
- **Tools/Frameworks:** Onnx, Akafka, 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
- publication: "Through the Lens of LLMs, Unveiling Differential Privacy Challenges", Usenix PEPR '24

