

## Professional Experience

### Spectrum (Charter Communications Inc.)

May 2024 – Present

Network Software Engineer

Denver, CO

- Engineered NetOps360, an enterprise-scale network platform that streamlines router configuration management and health monitoring through a user interface. Successfully implemented the system for real-time metrics processing and automated deployments across 200+ network devices, achieving 70% reduction in configuration errors and 50% improvement in network operation efficiency.
- Developed and deployed this platform using ReactJS frontend, Python backend, and FastAPI framework, implementing RESTful API architecture for scalable system integration. Designed automated configuration deployment system with standardized templates achieving 50% reduction in setup time, while integrating real-time network monitoring system for automated incident response and proactive issue detection.
- Implemented CI/CD pipeline using Jenkins for automated unit testing (Pytest for Python/FastAPI, Jest/React Testing Library for React) and continuous deployment on AWS, with containerized microservices architecture using Docker.

### Trimble Inc.

Sep 2023 – May 2024

Software Engineer Intern - Capstone

Boulder, CO

- Engineered and implemented the frontend user interface for Trimble SketchUp AI Assistant using ReactJS, featuring real-time 3D model visualization and automated Ruby code generation for SketchUp application.
- Developed RESTful APIs using FastAPI to integrate Azure OpenAI services with efficient prompt engineering and response handling, while implementing an automated Python testing framework to validate AI-generated Ruby code, resulting in 85% accuracy in Ruby Code Generation through comprehensive validation and error handling.

### Spectrum (Charter Communications Inc.)

Jun 2023 – Aug 2023

Network Software Engineer Intern

Denver, CO

- Developed the prototype of a network health monitoring platform using ReactJS and Flask, implementing real-time data visualization and network health metrics such as network latency, bandwidth utilization across 50+ devices.
- Implemented RESTful APIs and data processing pipelines, collect and analyze network performance metrics, achieving 40% improvement in issue detection time through automated alert monitoring system.

### Tata Consultancy Services

Jun 2021 – Jun 2022

Associate Software Engineer

Hyderabad, India

- Optimized Equitable's flagship applications (Broadridge-Investigo and LABS) by implementing performance monitoring, identifying bottlenecks, and executing targeted improvements across frontend and backend layers, achieving 25% faster response times. Established automated deployment processes using Azure DevOps CI/CD pipeline, ensuring consistent performance improvements across all application updates.

## Technical Skills and Certifications

**Languages:** Python, Java, C++, Go, Javascript, SQL, HTML5, CSS, NoSQL Databases: (Redis, Cassandra, MongoDB)

**Frameworks:** ReactJS, VueJS, Flask, NodeJS, Spring Boot, FastAPI, Tailwind CSS, Netmiko, SQLAlchemy

**Tools and Protocols:** Amazon Web Services (AWS), Docker, Jenkins, Argo CD, Ansible, Git, Kubernetes, Pytest, Jest, React Testing Library, Linux OS, Networking Protocols (TCP/IP, UDP, DNS, BGP, IS-IS), TLS, Prometheus, Grafana

**Certifications:** [AWS Certified Solutions Architect](#), [Microsoft Azure Fundamentals - AZ-900](#), [CCNA](#)

## Education

### University of Colorado Boulder

Aug 2022 – May 2024

Master of Science in Computer Science (GPA: 3.93 / 4.00)

Boulder, CO

### Kakatiya Institute of Technology and Science

Aug 2017 – May 2021

Bachelor of Technology in Computer Science (GPA: 3.62 / 4.00)

Warangal, India

## Projects

### Cloud-Native E-commerce Platform Deployment on AWS

- Deployed an open source E-Commerce application by containerizing its microservices with Docker, defining the multi-AZ EKS cluster and secure VPC infrastructure as code in Terraform, and implementing a GitOps CI/CD pipeline with Argo CD to fully automate deployments and manage public access via an Ingress controller and Route 53.