Tushin Kulshreshtha San Francisco, California 94132

Summary

J +1 (925) 819-4160 ■ tushink04@gmail.com ♠ dextron04.in

Network and Infrastructure Engineer with 4+ years building scalable, robust network systems and automation tools. Strong foundation in TCP/IP, UNIX systems, and multi-protocol environments with experience developing network monitoring systems, automation solutions, and infrastructure management tools for high-scale distributed systems.

Experience

SellWizr

June 2025 - Present

New York, NY

Infrastructure Engineer Intern

- Built enterprise infrastructure microservices using Golang with Docker containerization and automation systems, reducing deployment time by 40% through network architecture optimization and CI/CD pipeline development.
- Developed automated network monitoring and performance optimization systems using Python, achieving 60% improvement in system reliability through real-time data analysis and automated remediation workflows.
- Implemented comprehensive infrastructure automation with 98% system availability, demonstrating expertise in building robust, scalable network solutions for high-growth distributed environments.

Site Service Software

Aug 2024 - Apr 2025

Infrastructure & Backend Engineer Intern

San Francisco, USA

- Architected migration from legacy systems to modern distributed infrastructure using containerization and network optimization,
 achieving 40% performance improvement through systematic network design and protocol optimization.
- Developed 20+ network automation APIs using Python and Node.js, optimizing TCP/IP communication protocols and reducing latency by 30% in multi-vendor, multi-protocol distributed systems.
- Led infrastructure automation projects from design to deployment, implementing network monitoring systems and automated remediation tools for backbone and data center environments.

meetX

Nov 2023 - July 2024

Network & Systems Intern

San Francisco, USA

- Built network infrastructure monitoring systems with real-time analytics and automated alerting, implementing TCP/IP optimization and network performance measurement tools for scalable system architecture.
- Developed automated network configuration management using Python and shell scripting, improving system reliability by 35% through continuous monitoring and performance optimization in UNIX environments.
- Implemented network automation tools and infrastructure as code practices, building robust systems for network event detection and automated remediation in production environments.

Glitter Fund

Jan 2023 - Dec 2023

Systems & Infrastructure Intern

San Francisco, USA

- Led network infrastructure development for financial platform using TCP/IP optimization and multi-protocol communication, maintaining 99.9% uptime through robust network design and monitoring systems.
- Engineered real-time network performance monitoring and automated remediation systems deployed on AWS, optimizing network latency by 30% through data-driven infrastructure improvements.
- Implemented advanced network automation and monitoring tools with comprehensive logging and analytics, improving network reliability by 45% through systematic performance optimization and root cause analysis.

Technical Projects

ServerManager - Infrastructure Monitoring Platform — Link to GitHub

- Built comprehensive server infrastructure monitoring system with real-time network metrics visualization, SSH terminal integration, and automated alerting for distributed systems management across 20+ nodes.
- Implemented advanced logging system with network performance analytics and automated remediation capabilities, demonstrating expertise in network monitoring, system administration, and infrastructure automation at scale.

API Gateway with Load Balancing & Network Optimization — Link to GitHub

- Architected enterprise-grade API Gateway with intelligent load balancing using Caddy, Redis caching, and advanced rate limiting, achieving 99.5% availability and 40% latency reduction in high-traffic environments.
- Developed automated network configuration and monitoring systems with real-time performance tracking, implementing multi-protocol support and network optimization strategies for distributed microservices architecture.

SafeWalk - Real-Time Data Processing Platform — Link to GitHub

- Built comprehensive real-time data processing platform integrating live 911 call data feeds and Google Maps API with WebSocket communication, implementing efficient network protocols for real-time safety data distribution.
- Developed backend services using Node.js and Express with external API integrations and network optimization, demonstrating expertise in real-time data processing and network communication protocols for scalable systems.

Custom Unix Shell with Process Management — Link to GitHub

- Developed complete Unix shell implementation with support for piped commands, process management, and system call
 optimization, demonstrating deep understanding of operating systems and network fundamentals.
- Implemented robust inter-process communication and file descriptor management with comprehensive error handling, showcasing expertise in low-level system programming and network protocol implementation.

Technical Skills

Network & Protocols: TCP/IP, BGP, OSPF, ISIS, MPLS, GRE, IPnIP, Network Design, Multi-Protocol Environments Programming & Automation: Python, Golang, C, C++, Rust, Shell Scripting, Network Automation, Infrastructure as Code Infrastructure & Systems: UNIX/Linux, Docker, AWS, Network Monitoring, Load Balancing, Distributed Systems, SSH Network Engineering: Switching, Routing, Network Architecture, Performance Optimization, Automated Remediation, Scalability Education

San Francisco State University

Expected Fall 2025

Structures & Algorithms