

# Sabarish Muthumani

174th Ct NE, Redmond, WA 98052 (540)605-0766 [sabarishsbrsh1@gmail.com](mailto:sabarishsbrsh1@gmail.com) [linkedin.com/in/sabarishmn](https://www.linkedin.com/in/sabarishmn) [sabarishmn.github.io](https://sabarishmn.github.io)

## Professional Summary

---

- I'm a hands-on engineer with over 4 years of experience working in high-scale environments, including systems processing over **10 million+** requests per day, across top-tier organizations like Cisco, NPCI, and Virginia Tech.
- System-side programming experience involving file systems, virtualization, shell scripting and familiar with storage protocols and backup application automation using Bash.
- Strong Object-Oriented Programming (OOP) knowledge with 4 years of practical experience in Python and Java.
- I bring solid academic foundations in Operating Systems, Computer Networks, Virtual Memory, Computer Architecture, Multiprocessor Scheduling, Software Development Lifecycles, Data Structures and Algorithms.
- My experience spans across production-grade CI/CD pipelines using GitLab CI, Jenkins, SonarQube, Selenium, and Zabbix, with strong focus on observability and reliability via ELK Stack, Prometheus, and Grafana.

## Education

---

### Virginia Polytechnic Institute and State University

Master of Science in Computer Engineering, GPA: 3.8/4

Aug. 2023 – May 2025

Blacksburg, USA

### Amrita School of Engineering

Bachelor of Technology in Computer Science and Engineering, 7.7/10

Aug. 2016 – May 2020

Coimbatore, India

## Work Experience

---

### Virginia Tech

#### Network Engineer

Aug 2024 - Present

Blacksburg, Virginia

- Developed a monitoring solution using Zabbix and PostgreSQL, and managed logs with ELK Stack.
- Worked on system-side configurations including RAID, ZFS, and OS provisioning to support fault-tolerant file systems.
- Set up DELL EMC and Synology PCIe storage solution, to enhance r/w performance for data management.
- Wrote shell scripts for automating system backups, log rotation, and disk monitoring across GPU/storage clusters.
- Managed authentication using Ansible, integrated LDAP with 2FA for secure access within the college.
- Configured Cisco switches, enabled firewall on servers, and optimized file systems to meet specific requirements.
- Created virtualization clusters for 5G research, installing radios and setting up KVM for seamless integration.
- Managed Windows/macOS PCs and helped to setup and troubleshoot the issues for students and faculties.

### Mouri Tech

#### AI Analyst Intern

May - July 2024

Irving, Texas

- Reduced hiring time by 40% by developing an AI screening platform by developing a chat-bot and AI screening platform using Azure AI, OpenAI, Document Intelligence and GraphQL for a RAG application.

### Cisco Systems, Inc. (~1.5 years)

#### Software Engineer

April 2022 - August 2023

Bangalore, India

- Deployed scalable SaaS platforms by developing async REST APIs using Java Spring Boot, on Kubernetes.
- Resolved XSS vulnerabilities, Kafka lags, Camunda workflows, and Angular updates, improving performance by 30%.
- Built a scalable migration workflow in Node.js for 1000+ customers, reducing cutover time by 75% and minimizing down-time.

### National Payments Corporation of India (NPCI) (~2 years)

#### Senior Associate Developer

May 2020 - March 2022

Hyderabad, India

- Automated onboarding of 150+ banks to a Hyperledger-based platform using Bash, reducing setup errors by 80%.
- Implemented 3 ACK Verification Logic in Node.js, using RabbitMQ and Redis increasing success rate to 90%.
- Improved production deployments using CI/CD pipelines via GitLab CI and Jenkins, reducing rollback time by 75%.
- Boosted token generation/issuance through batch processing in Hyperledger Fabric using Golang, by 150%.
- Provisioned ElastAlert and Kibana dashboards for monitoring using ELK stack, reducing manual monitoring.
- Set up OS and Kubernetes clusters for prod, staging, test, and dev environments to streamline SDLC and testing.

## Projects

---

- Custom Work Stealing Algorithm | [Repo](#) | Java, Multiprocessor, Threads, ForkJoin Pool, Java
- Wildfire detection using OpenCV | [Repo](#) | OpenCV, Image processing, CNN, computer Vision

March 2024

December 2023

## Technical Skills

---

**Languages:** C, C++, Java, JavaScript, TypeScript, Python, Go, Bash, SQL/NoSQL

**Frameworks/Tools:** Node.js, Spring Boot, Angular, React.js, REST APIs, Docker, Kubernetes, GitHub

**Cloud/DevOps:** AWS, Azure AI, GitLab CI, Jenkins, SonarQube, Zabbix, ELK Stack, Prometheus, Ansible

**Database/Infra:** PostgreSQL, MySQL, MongoDB, Redis, RabbitMQ, Linux/Unix, KVM, Hyperledger Fabric