Simran Gawri

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Education

University of Maryland, College Park — College Park, USA
Master of Science – Computer Science, GPA: 3.89/4.00 — *Aug 2024 – May 2026*

Guru Gobind Singh Indraprastha University — Delhi, India
Bachelor of Technology - Electronics and Communications, GPA: 8.91/10.00 — *Aug 2018 – Aug 2022*

Skills

Programming Languages: C++, Python, Java, SQL, Shell Scripting
Tools & Frameworks: Git, Docker, Kubernetes, Ansible, Jenkins, Spring Boot, React, Angular, REST, AWS, Apache Kafka
Concepts: Linux/Unix Systems, TCP/IP Networking, Load Balancing, CI/CD, Distributed Systems, Infrastructure as Code (IaC)

Experience

Esri – Software Engineer Intern — May 2025 – Aug 2025

- Decreased Kubernetes cluster deployment time from **2+ hours** to under **10 minutes** using optimized Ansible playbooks, saving 45 minutes per deployment on average.
- Integrated CyberArk to dynamically fetch and manage TLS certs and secrets; securely injected TLS assets into the cluster via Kubernetes Secrets and ConfigMaps.
- Optimized Kubernetes cluster architecture by configuring HAProxy on a dedicated node to serve dual roles—load balancing control plane traffic and acting as a TLS-terminating reverse proxy—**reducing infrastructure footprint by 20 percent.**
- Led the design and implementation of an **automated disaster recovery system** for Jenkins pipelines, coordinating with senior engineers to ensure cross-cluster consistency.
- **Achieved full cluster recovery within minutes**, ensuring business continuity and restoring production systems to pre-failure state with minimal downtime.

Nagarro – Software Engineer — Oct 2022 – Aug 2024

- Developed and maintained **microservices within the Notifications platform**, focusing on message formatting, validation, and routing logic, so that upstream services could publish events while downstream email/SMS/push services received clean, structured payloads.
- Implemented **inter-service communication using REST APIs and Kafka consumers**, handling error retries, idempotency, and logging to ensure the notification pipeline remained reliable and debuggable in production.
- Mentored two interns on microservices and API integration, guiding them through project design reviews and debugging practices.

CloudSufi Pvt. Ltd. – Java Developer Intern — Feb 2022 – Jul 2022

- Engineered a comprehensive test suite using **JUnit** and **Mockito**, **achieving a test coverage of 95%.**
- Collaborated in the implementation of REST API endpoints using Spring Boot and Maven, facilitating seamless integration, and optimizing data flow between systems.

Schneider Electric – Summer Intern — Jul 2021 – Sep 2021

- Utilized Python for data analysis and visualization to identify key performance indicators (KPIs) and trends.
- **Built a predictive analysis model** for supply chain management and advertising campaign optimization, **enhancing demand forecasting accuracy by 25%.**

CyberFlax Pvt. Ltd. – Software Developer Intern — Jun 2021 – Aug 2021

- Constructed a data extraction pipeline for Portable Executable files using Python, achieving **90% accuracy in malware classification** and reducing false positives by 15% for improved threat visibility.
- Executed **rigorous data preprocessing** to handle missing values, outliers, and ensure data integrity, leading to a **20% improvement in model accuracy.**

Projects

Multifunctional AI-powered Discord Bot | *OpenAI, Python* — Mar 2025

- Developed a scalable Discord bot using Python and `discord.py`, leveraging asyncio for asynchronous API interactions.
- Integrated NLP features like text and image summarization, translation, and real-time information retrieval for weather and news.
- Designed in-memory systems for task management and reminders, optimizing for low-latency user experience.

E-commerce Platform Development and Integration | *REST API, Angular 11* — Oct 2023

- Created an integrated e-commerce solution with RESTful APIs for secure user authentication, seamless registration, and efficient product management, and Ads integration.

Malware Detection in Android Application | *Machine Learning, Python* — Jul 2021

- Designed a machine learning model for security software development, applying logistic regression to achieve an accuracy of 95 percent in detecting malicious Android applications through permission analysis.
- Refined machine learning model through rigorous testing with real-world datasets, decreasing false positives by 12% and improving practical efficacy for security software.