# Suryansh Prajapati

# **EDUCATION**

# Ramaiah Institute of Technology (https://msrit.edu), Bengaluru, IN

B.E., Computer Science and Engineering with Cybersecurity

Nov 2022 - Jun 2026

## WORK EXPERIENCE

# Samsung R&D Institute India (https://research.samsung.com/sri-b) — Bengaluru, IN

Aug 2024 – Present

Research and Development Scholar (Intern)

- Improved system performance through the development of efficient solutions for resource-constrained environments.
- Optimized on-device processing to enhance reliability and efficiency in low-end hardware systems.

#### Velocita Racing (<a href="https://velocitaracing.github.io">https://velocitaracing.github.io</a>) — Bengaluru, IN

Feb 2023 - Present

Software Lead / Operations Lead (Formula Student Team Member)

- Built a telemetry platform for real-time race data visualization using **Prometheus** and **Grafana**.
- Implemented CI/CD pipelines with Jenkins and Kubernetes, improving deployment efficiency by 40%.

#### App Mastery (https://appmastery.co) — Toronto, CA

Jul 2024 - Sep 2024

Junior Software Development Engineer (Intern)

- Developed AWS Lambda APIs capable of handling 1M+ daily requests with scalability and efficiency.
- Integrated **Datadog** for enhanced monitoring and incident response.

#### SAP (https://sap.com) — Bengaluru, IN

Feb 2024 - Jul 2024

Student Co-Ordinator for Hackfest 2024 & Finalist

• Developed the online platform for Hackfest 2024, with **lakhs of user** engagement.

## **COMPETITIONS**

Flipkart Grid 6.0: Top 20 All India, Information Security Track.	2024
IIT-Bombay: National Finalist, UNESCO Supply Connect.	2024
SAP Hackfest: National Finalist, high-availability platform design.	2024
Google Code-In: International Finisher (2017, 2019) for open-source contributions.	2019

# **PROJECTS**

#### **FSAE Telemetry System**

Developed a **real-time observability platform** using **Prometheus**, **Grafana**, and **Redis** for Formula Student teams.

## HomeCloud

Open-source, self-hosted cloud platform replicating AWS services, enabling easy, scalable infrastructure deployment on local hardware.

# **System Monitoring Dashboard**

Created an integrated system for **real-time monitoring** using **top**, **iotop**, and custom logs, combining **ELK Stack** for log aggregation and visualization.

#### **Digital Identity Blockchain**

Designed a **blockchain-based system** for secure identity verification on a distributed ledger, ensuring privacy and data integrity.

# **CLI Tools**

Built a Password Manager and alias manager for SimpleLogin (ProtonMail) using Python.

### **Custom Shell**

Created a custom **command-line shell** with piping and I/O redirection to enhance the usability of system processes.

# **Browser Extensions**

Built extensions like **Tab Manager** and **WebP-to-PNG Converter** to automate and optimize web browsing.

#### **Bots & Automations**

Developed custom bots for **Telegram** and **Discord** to automate tasks and integrate systems for streamlined communication.

#### Video Interpolation and Frame Extender

Built a system for **video frame interpolation** to increase frame rates and extend video length while maintaining visual quality using **AI-based models**.

#### **SKILLS**

- Languages: C, C++, Python, Java, JavaScript, SQL, MATLAB, Bash, Go, Solidity
- Cloud: AWS, Azure, GCP
- DevOps & Automation: Docker, Kubernetes, Terraform, Jenkins, Helm, Ansible
- Monitoring & Observability: Prometheus, Grafana, Datadog, ELK Stack
- Databases: MongoDB, PostgreSQL, Redis
- Version Control: Git