

Srujana Vanka

✉ srujanavanka1@gmail.com

🌐 www.linkedin.com/in/srujana-vanka

🌐 srujana-16.github.io

Education

International Institute of Information Technology, Hyderabad

2020 – 2024

Bachelor of Technology in Electronics and Communication Engineering

Experience

Head Digital Works

July 2024 – Present

Software Development Engineer | Java, Python, AWS, Grafana

Hyderabad

- Building scalable **Java Spring Boot** services powering APIs and tools, with real-time monitoring via Grafana and A/B testing to enhance system performance.

SmallJoys

May 2023 – June 2024

Software Engineer Intern | Python, Javascript, Cypress

Hyderabad

- CI/CD & Automated Testing:** Accelerated release cycles by **30%** by implementing end-to-end test automation with **Cypress**, reducing manual QA efforts by **70%**; Fixed 20+ critical bugs to improve system uptime and user experience.

Microsoft

April 2022 – May 2022

Microsoft Engage Mentee | Python, MySQL, HTML/CSS

Remote

- Participated in a Microsoft mentorship program securing a spot in the **top 1 percentile** of applicants nationwide.
- Designed a **facial recognition** attendance system with **95%** accuracy using **OpenCV**. Developed Tkinter-based GUI and MySQL backend for seamless data management.

Projects

Web Apps | Python, JavaScript, React, Docker

- Speech Transcription Verification:** Built a **full-stack application** for speech-to-text transcription editing with audio playback and virtual keyboard support. Implemented **RESTful APIs** and containerized services for efficient deployment.
- Gene Sequence Prediction:** Developed a secure prediction tool for COVID-19 genomic sequences with **JWT authentication**, sequence **visualization**, alignment **score computation**, and **real-time location mapping**. Deployed the application using **Docker Compose**.

Image Processing and ML | Python, CV

- Face Recognition Using CNNs:** Implemented specialized **CNN models** for facial recognition considering orientation and demographic variance, achieving over **97%** accuracy across diverse datasets.
- Empty Parking Space Detector:** Implemented **real-time vehicle detection** and **computer vision** pipelines for parking slot detection with over **99%** accuracy using frame differencing and contour analysis.

Dijkstra-Based Smart Routing System | C

- Implemented and modified **Dijkstra's algorithm** to navigate the shortest path on a customized map, dynamic edge weights, and adaptive routing to accommodate unpredictable events, employing **Data Structures and algorithms** for implementation.

Game Dev | Python, Javascript, HTML/CSS

- CodeCraftedArcade:** Developed **10+ interactive arcade games** covering genres like shooting, racing, and memory games in both **web and terminal** environments.

CLI Projects | C, Linux, Make

- C-shell:** Implemented an interactive shell program in **C** based on **UNIX** handling **process management**, **directory navigation**, **I/O redirection**, **piping**, and **signal handling** with support for semicolon-separated command lists.

Technical Skills

Languages	Java, Python, JavaScript, C++, C, R, SQL, HTML/CSS
Frameworks & Tools	React, NodeJS, Spring Boot, Flask, Cypress, Docker, PyTorch, TensorFlow, Git, AWS, Grafana, Jenkins, Linux, Bash
Core Competencies	Data Structures & Algorithms, System Design, REST API, FastAPI, Microservices Architecture, CI/CD Pipelines, Test Automation, Unit & Load Testing, OOP, Machine Learning, AI Applications

Achievements & POR

- 98.2%** in 2020 XII Board Examinations
- 99.56** All India JEE Mains Percentile
- Open Source Contributor, GSSOC'23:** Contributed to 6 repositories, merged 18 PRs, ranked **106th/13,000+**
- Teaching Assistant for Real Analysis; Science 1 Courses**
- Joint Cultural Secretary @ IIIT-H**
- Coordinator @ The Dance Crew IIIT-H**
- Editor @ Ping! - Student Media body**
- Member @ NSS IIIT-H**
- Ranked **top 1%** nationwide as Microsoft Engage Mentee

Extra-Curricular Activities

Kuchipudi Dancer

2015 – Present

Learning under the renowned guru Smt. Deepika Reddy, I have performed at prestigious venues and national events such as the Maha Kumbh, G20 Ministers Meeting, CM Cup, Konark, and Khajuraho dance festivals to name a few.