SRUJANA VANKA

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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*
- Developing high-performance, scalable platform services with **Java Spring Boot** that power internal APIs and consumer-facing tools, while creating and analyzing real-time Grafana dashboards and A/B testing to optimize 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, Maven, 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.