Vedansh Surjan

(945) 274-8792 | vedansh008@gmail.com | https://www.linkedin.com/in/vsurjan | https://github.com/karlos37/Dallas, Texas, 75252

EDUCATION

The University of Texas at Dallas

May 2025

Master of Science, Computer Science

GPA - 3.8/4.0

Coursework: (CS 5343) Data Structures and Algorithms, (CS 6363) Design and Analysis of Algorithms

Birla Institute of Technology and Science Pilani (BITS Pilani), India

July 2020

Master of Science, Mathematics – (INSPIRE Scholarship)

GPA - 3.6/4.0

Coursework: Object Oriented Programming, C Programming, Computer Architecture

PROFESSIONAL EXPERIENCE

Mimosa Networks, Dallas, USA

May 2024 - May 2025

Software Engineer Intern

- Improved REST API response times by 30% for Mimosa's MMP platform, enabling efficient device and network management for over 300,000 devices while deploying the solution on AWS EC2 to enhance scalability.
- Upgraded 25 microservices from Java 8 to Java 17 and **Spring Boot 1.5 to 3.3.1**, cutting production incidents by 40% through rigorous TDD with unit, integration, and end-to-end tests.
- Added custom Grafana dashboards to monitor Kafka messages failure rates to brokers outside the organization using Prometheus and Redis.

Société Générale Global Solution Center, Bangalore, India

Aug 2020 - July 2023

Senior Software Engineer

- Engineered a scalable and robust full-stack inventory-finance web application for the European market by architecting Java Spring Boot 4 microservices in an **Agile** environment, driving a 35% revenue increase.
- Reduced API latency by 50% (900 ms \rightarrow 450 ms) by implementing third-party response caching, adding pagination for large payloads, and coordinating with cross-functional teams, enhancing system performance and user satisfaction.
- Improved microservices security by implementing an enhanced authentication mechanism using **OAuth2** across all services, reducing vulnerabilities by 80%.

Aditya Birla Group, Bangalore, India

June 2019 - June 2020

Computer Vision Intern

- Spearheaded a project for real-time helmet-wearing detection in manufacturing plants with over 90% accuracy at 60 frames per second using Intel's OpenVINO tool.
- Published a <u>research paper</u> on my work for the irregularities on one of the biggest databases used for training machine learning models in the fashion industry DeepFashionV2.

PROJECTS

UTD ISA Mobile App – Swift, PostgreSQL - https://github.com/karlos37/utdisa xcode/

June 2025 – July 2025

Built an iOS app in Swift to list upcoming ISA events, manage airport-pickup requests, and launch a student housing marketplace—streamlining communication and replacing fragmented WhatsApp workflows.

UTD Trends - React, Java, MongoDB - https://github.com/UTDNebula/utd-trends

Jan 2024 - May 2024

• Built a web application to compare courses offered at UTD by different professors to help students enroll in courses at UTD, providing students with unique insights and reducing the enrollment process time by 50%.

SKILLS

Languages: Java, Kotlin, C++, JavaScript, TypeScript, Python, Go, SQL

Databases: PostgreSQL, MySQL, Redis, Cassandra, MongoDB, Oracle, H2, Power BI, Tableau, Power Query, Power Apps **Tools**: Elastic Search, Docker, Kafka, Git, Maven, Camunda, Flutter, RabbitMQ, Figma, Confluence, Jira, SharePoint, Canva, **Technologies**: AWS (EC2, S3, Redshift), React, Angular, Azure, REST API, Distributed System, NumPy, Panda, EDA, Agile **Creative and Soft Skills**: Decision making, Root Cause Analysis, Problem solving, Strong written and verbal communication. **Leadership**: President - UTD Indian Students Association, President - Maharashtra Mandal - BITS Pilani