

# Mutharaju Vishnu Sai Satwik

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## Projects

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### Eduvo AI - Full-Stack AI SaaS Career Guidance Platform | JavaScript, Firebase, Google Cloud, Gemini API

Link: [www.eduvoai.com](http://www.eduvoai.com)

- **Engineered & deployed** a live SaaS platform integrating Google Gemini Pro LLM via Google Cloud Console to generate real-time, personalized career roadmaps.
- **Implemented** a serverless architecture using **Firebase** for backend authentication and real-time database management, ensuring secure user data handling.
- **Configured** enterprise-level DevOps: Managed **DNS settings**, SSL encryption, and verified domain ownership via **Google Search Console** for SEO indexing.
- **Integrated Google Analytics** to track user acquisition flows and engagement metrics, enabling data-driven product iterations.
- **Developed** a revenue-focused "Affiliate Injection System" using JavaScript to map user goals to course recommendations dynamically.

### NaviGate - Algorithm-Based Campus Wayfinder | Kotlin, Android SDK, Data Structures (Graphs)

- **Engineered** an Android-based campus navigation application to solve the "last-mile" wayfinding problem by providing accurate, turn-by-turn walking directions within large and complex campus environments.
- **Implemented Dijkstra's shortest-path algorithm** on a custom weighted graph to compute optimal routes between buildings with efficient time complexity  $O(E + V \log V)$ .
- **Architected the application using MVVM design principles**, leveraging Kotlin Coroutines to execute computationally intensive pathfinding logic asynchronously without blocking the UI thread.
- **Designed and integrated an Accessibility Mode** that dynamically re-weights graph edges in real time to prioritize elevators and ramps, enabling inclusive navigation for wheelchair users.
- **Optimized memory and performance** by modelling campus maps using adjacency lists instead of matrices, significantly reducing space complexity for sparse graph data.

## Certificates

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### Business Intelligence & Analytics | NPTEL (IIT Madras)

- Gained a foundational understanding of data-driven decision-making and how business metrics influence product strategy.

### Google UX Design Professional Certificate | Coursera (Google)

- Mastered user-centric design principles, wireframing, and accessibility standards to build intuitive digital interfaces.

## Skills

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- **Languages:** Java, JavaScript, Kotlin
- **Cloud & DevOps:** Firebase, Google Cloud Platform (GCP), Netlify, Google Analytics, Google Search Console
- **Tools & Platforms:** Git/GitHub, Android Studio, VS Code, IntelliJ IDEA, Figma, Postman
- **Coursework:** Data Structures & Algorithms (DSA), Object-Oriented Programming (OOPs), DBMS

## Education

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### Lovely Professional University

Computer Science and Engineering

2022 – 2026

Jalandhar, Punjab

### Sri Srinivasa Junior College

Class XII (MPC)

2020 – 2022

Kavali, Andhra Pradesh

### St. Ann's English Medium High School

Class X

2019 – 2020

Kavali, Andhra Pradesh