KOMMU VENKATA SASIDHAR

+91-9000136344 | sasidharkommu@gmail.com | LinkedIn | GitHub | LeetCode

OBJECTIVE

Aspiring AI Engineer with strong foundations in Node.js, MongoDB, and data structures.Eager to contribute to scalable chatbot and voicebot solutions by integrating backend APIs, collaborating with cross-functional teams, and delivering high-quality automation experiences.

EDUCATION

Amrita School of Engineering — **Sept 2022 – June 2026**
B.Tech - Computer Science and Engineering - ***CGPA: 7.15*** — *Ettimadai, Tamil Nadu*

Narayana Junior College — **June 2020 – Aug 2022**
MPC - Higher Secondary Education - ***Percentage: 97.8%*** — *Hyderabad, Telangana*

Narayana Olympiad School — **July 2019 – June 2020**
Secondary Education - ***GPA: 10.00*** — *Hyderabad, Telangana*

PROJECTS

AgroESP – Smart Polyhouse Solar Drying System

React | Node.js | SQL | InfluxDB | MQTT | Tailwind CSS | Spresense

- Contributed to web development for AgroESP under Sony's SSUP at Amrita Vishwa Vidyapeetham.
- Developed a responsive web interface using React and Tailwind CSS to monitor solar dryer environments.
- Used Node.js for backend APIs and SQL for authentication and profile management.
- Integrated MQTT protocol for real-time communication with Sony Spresense edge devices.
- Stored and visualized time-series sensor data via InfluxDB for monitoring temperature/humidity.
- Supported intelligent automation using multicore learning models for smart polyhouse farming.

Personalized News Aggregator

MongoDB | Express.js | React.js | Node.js | Machine Learning

- Built a MERN-stack web application that delivers personalized news based on user preferences.
- Integrated third-party news APIs and implemented secure user authentication.
- Enabled topic-based filtering with real-time content updates.
- Incorporated a machine learning model for sentiment analysis to moderate user comments and ensure content quality.

Fog Computing–Driven Real-Time Air Quality Monitoring System

Fog Computing | LoRa | AWS | Raspberry Pi | Arduino | React | Node.js

- Designed a fog computing system to enable edge-level air quality monitoring and reduce cloud load.
- Used Raspberry Pi as fog nodes for local data filtering before cloud transmission.
- Established LoRa-based network for energy-efficient long-range sensor communication.
- Integrated with AWS EC2, IoT Core, and RDS for hosting, messaging, and database management.
- Built a React + Node.js dashboard for real-time visualization and threshold-based alerts.

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, HTML, CSS

Frameworks/Libraries: React.js, Node.js, Express.js, Tailwind CSS

Databases: MongoDB, SQL

CERTIFICATIONS

- Full Stack Web Development – Apna College
- Artificial Intelligence Primer – Infosys
- Software Engineering Intern – HackerRank

ACHIEVEMENTS

- Presented a paper titled **"Federated Learning Approach for Predicting Conviction using FIR Data"** at **ICDSA 2025**.