KOMMU VENKATA SASIDHAR **└** +91-9000136344 **▽** sasidharkommu@gmail.com **☐** <u>LinkedIn</u> **♠** <u>GitHub</u> **〈/>** <u>LeetCode</u>

OBJECTIVE

Aspiring software engineer passionate about scalable systems and impactful solutions. Eager to collaborate on real-world development projects and enhance coding skills in a world-class engineering environment. Committed to continuous learning, innovation, and making a global impact through technology.

EDUCATION

Amrita School of Engineering

B. Tech - Computer Science and Engineering - CGPA: 7.15

Narayana Junior College

MPC - Higher Secondary Education - Percentage: 97.8%

Narayana Olympiad School

Secondary Education - GPA: 10.00

Sept 2022 - June 2026

Ettimadai, Tamil Nadu

June 2020 - Aug 2022

Hyderabad, Telangana

July 2019 - June 2020

Hyderabad, Telangana

PROJECTS

AgroESP – Smart Polyhouse Solar Drying System

React | Node.is | 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.

Personalized News Aggregator

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

- 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.
- Deployed the application on Render for live access and seamless hosting.

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.