

# KOTARI SANDEEP

Full Stack Development | kotarisandeep198@gmail.com | +91 6380317072

[Linkedin](#) | [GitHub](#)

## Professional Summary

Experienced full-stack developer skilled in React.js, Express.js, Node.js, MySQL, MongoDB, Java, Spring Boot, and Firebase. Expert in building scalable, secure applications with clean frontend-backend integration and REST APIs. Strong in DSA, microservices, and solving real-world problems through efficient, tech-driven solutions.

## Education

Kalasalingam University	Srivilliputhur, Tamil Nadu
Bachelor of Technology in Computer Science and Engineering (AIML)	CGPA: 8.35/10

## Technical Skills & Tools

- **Frontend Development:** HTML5, CSS3, JavaScript (ES6+), TypeScript, React.js, Next.js, Redux, Tailwind CSS, Bootstrap, Material UI, Chart.js, Laravel, PHP, Figma to Code
- **Backend Development:** Node.js, Spring Boot, Express.js, NestJS, RESTful APIs, GraphQL, WebSockets, MQTT (MQTT.js, Mosquitto)
- **Databases & Data Management:** MongoDB (MongoDB Atlas), Firebase Firestore, Firebase Realtime Database, PostgreSQL, MySQL
- **Deployment:** Git, GitHub, GitHub Actions, VS Code, Vercel, Render, Railway, Heroku, Netlify, Docker
- **Cloud Platforms & Integrations:** Firebase, AWS (EC2, S3, IoT Core), Azure (Functions, App Services, IoT Hub), Twilio, SendGrid, Blynk (via APIs/MQTT)

## Experience

### KARE Full Stack Intern

Sep 2024 – Present

- Currently working as a Full Stack Developer Intern at Kalasalingam Academy of Research and Education, where I am developing and deploying full-stack applications using Laravel, PHP, Node.js, React, and MS-SQL. My work includes building secure authentication, real-time databases, RESTful APIs, scalable event booking systems and bulk event hall registration solutions for students.

### Software Engineering Intern

Feb 2025 - Mar 2025

- Developed REST APIs and controller layers using Spring Boot in a microservice setup
- Integrated Kafka for real-time data messaging
- Configured H2 Database and managed schema-level design

## Projects

### Zero Hunger Mission: AI-Powered Food Rescue, Redistribution, and Social Welfare Support Platform

- Built and deployed a real-time social impact full-stack application ([hungrysaver.netlify.app](https://hungrysaver.netlify.app)) using **Firestore** (Auth, Firestore, FCM) and **RESTful APIs** to enable **city-based** donor-volunteer matching for **food donation**, NGO support, and emergency aid. Integrated secure login, **push notifications**, and live status tracking (**Accept → Pickup → Donate → Complete**). Incorporated AI techniques such as **anomaly detection (Isolation Forest, Z-score)**, volunteer performance rating, and voice command support to enhance reliability and user experience. Deployed on Vercel and Netlify with a responsive UI, the platform scales to **reduce food waste**, support underserved communities, and deliver timely help through **smart tech** and community collaboration.

### Robotic Hand for Color Sorting Using Computer Vision and ML

- This project features a **custom ML model** integrated with **OpenCV on Raspberry Pi** for **accurate real-time color detection**, even under varying lighting. Paired with **Arduino-controlled servo motors**, it ensures precise, efficient sorting. The **optimized mechanical design enhances speed, accuracy, and scalability**, setting it apart from traditional color-sorting systems.

### AI-Powered E-Learning Platform

- Built a next-gen, AI-powered e-learning platform featuring an **AI smart board**, **video summarization**, and chatbot for personalized learning, enhanced with **3D modules**, a browser extension, and real-time NLP to boost engagement and accessibility—leveraging a modular, **scalable architecture** using **Python (PyTorch, OpenCV), React.js, Next.js, and MongoDB** to enable future-ready digital classrooms.

## Achievements

- 1st Prize, IBM Ice Day Poster Presentation.
- Winner – Software Freedom Festival 3.0 Hackathon (KARE).
- Qualified for Final Round, Samgatha x Vashisht Hackathon.