Sakthi Santhosh

Loves Programming and Electronics

+91 637-9921036 📞
sakthisanthosh010303@gmail.com ✉
in/sakthisanthosh010303 🔗
sakthisanthosh010303 🔗

With a unique blend of expertise spanning Cloud Technologies, IoT and Embedded Systems, I offer a rare combination of skills that seamlessly merges computer science and electronics. Equipped with cross-domain skills, I am ready to conquer the challenges of modern IT infrastructure.

Education

- **Agarwal Vidyalaya**
  94.8% • May 2018
- **Agarwal Vidyalaya**
  92.16% • May 2020 • School First
- **R. M. K. Engineering College**
  9.09 CGPA • Final Year (2020-2024)

Technical Skills

Programming Languages
- Python/µPython
- C/C++ & Embedded C

Cloud
- Amazon Web Services
- GNU/Linux (Primary OS)
- Docker
- Kubernetes

DevOps
- Ansible
- Git & GitHub
- HashiCorp's Terraform and Packer
- Django/Django REST/Flask/Fast API Back-end Web Development
- Machine Learning and Data Science with Sci-kit Learn

Embedded Systems
- Raspberry Pi, AVR and ESPxx Family µC
- Zephyr RTOS
- PCB Designing (KiCAD, EasyEDA)
- Internet of Things
- AdafruitIO, Arduino IoT, AWS IoT & Blynk

Certifications

- **AWS Cloud Practitioner**
  810 Points • 2023
- **Cisco Certified Network Associate**
  82% • 2022

Languages

- **English**
  Professional Proficiency
- **Tamil**
  Bilingual Proficiency
- **Telugu**
  Native Proficiency
- **Hindi**
  Working Proficiency

Internships

ESAB India
AI/Back-end Engineer • February 2024 • 2 Months
- Built a multi-output timing prediction model for optimal pulse welding based on non-different wire-feed speeds optimized for running on edge devices.
- Spearheaded the development of file uploads from local/NFS file systems to a closed-source project lifecycle management software called PTC WGM.
- Built a LaTeX-based template generation engine with drag-and-drop reusable components for creating safety/instruction manuals, reducing the time of creation for these documents.

iamNeo
Back-end Engineer • January 2023 • 2 Month
- Built authentication-backed with Django REST Framework implementing JWT-based authentication system with best practices.
- Led PostgreSQL data migration efforts.

KBB IoT
IoT Developer & Trainer • March 2022 • 1 Month
- Built and deployed remote monitoring IoT solutions.
- Trained over 150 graduate students on IoT.

Projects

AI Enhanced CCTV Surveillance
GitHub • April 2023
- Enhanced CCTV systems with autonomous anomaly detection.
- Leveraged Raspberry Pi and binary image classifier trained with over 10,000 images for real-time inference.
- Orchestrated rapid alerting and provided comprehensive data to authorities during anomaly events.

Asset Management System with Custom CNN Object Detection Model
Smart India Hackathon-2022 • Finalist • GitHub • August 2022
- Designed solar-powered IoT device for geo-tagging assets under the CSR initiative of Coal India Limited.
- Implemented the project to consume power as less as possible by designing various power domains, underclocking the CPU etc.
- Enabled efficient tracking via LoRa & LoRaWAN network and custom object detection model.
- Utilized AdafruitIO cloud platform for secure data storage and accessibility.
- Orchestrated rapid alerting and provided comprehensive data to authorities during anomaly events.

Wildlife Interference Monitoring System
Glance Village Hackathon-2023 • Winner • GitHub • May 2023
- Spearheaded wildlife fatality reduction project with innovative technology.
- Deployed Raspberry Pi-based devices with custom multi-class CNN image classifiers.
- Centralized real-time data analysis and intuitive dashboard.
- Automated distress calls for timely notifications and coordination.