Sandhanapandiyan

✉ sandhanapadiyanmurugan@outlook.com   📞 7540031625

🐙 github.com/sandhanapandiyan   in linkedin.com/in/sandhanapandiyan

Summary

Passionate Python Developer with expertise in AI, web development, and IoT. Proficient in designing scalable solutions, integrating machine learning models, and deploying real-time applications. Strong analytical skills and a quick learner, eager to contribute to innovative projects.

Experience

Python Fullstack Intern, Uniq Technologics   *Aug 2023 - Jan 2024*

- Developed and optimized web applications using Python, Flask, and MySQL.
- Designed REST APIs for seamless front-end and back-end integration.
- Gained hands-on experience in AI model deployment and database management.

Projects

AI-Powered Chatbot for Customer Support (Python, TensorFlow, Flask, AWS)

- Developed an NLP-driven chatbot to automate customer interactions, reducing response time by 60%.
- Integrated deep learning models for sentiment analysis and intent recognition.
- Deployed using Flask on AWS for real-time user engagement.

IoT-Based Smart Home Automation (ESP32, MQTT, Python, Flask, Firebase)

- Engineered a real-time smart home system with remote appliance control.
- Integrated MQTT for seamless device communication and cloud-based storage.
- Built a Flask web dashboard for monitoring and automation scheduling.

Industrial Defect Detection System (Python, OpenCV, TensorFlow, Flask, IoT)

- Developed an AI-powered vision system for real-time defect detection in manufacturing.
- Used deep learning models (CNN) to analyze product defects with 95% accuracy.
- Integrated an IoT-based alert system to notify operators of defective products.
- Deployed a Flask-based web interface for visualizing defects and analytics.

Enterprise-Level Schedule Management System (Python, Flask, MySQL, Bootstrap)

- Designed a multi-user task management system with calendar integration.
- Implemented role-based access control for secure data management.
- Optimized MySQL queries to handle large-scale scheduling data efficiently.

Skills

- **Programming:** Python, JavaScript, Flask, Django, MySQL
- **AI/ML:** Machine Learning, NLP, TensorFlow, OpenCV
- **IoT:** MQTT, ESP32, Embedded Systems
- **Web Technologies:** REST APIs, ORM, SQLAlchemy, Bootstrap
- **Tools:** Git, Ethical Hacking, Numpy, Pandas

Education & Certifications

Education

- **Master of Computer Applications (MCA)**
  Anna University, *2024*
  CGPA: 8.3
- **Bachelor of Engineering (B.E)**
  Anna University, *2021*
  CGPA: 7.8

Certifications

- HackerRank Python Certification
- Python (G-Tech Computer Education)
- Python (Perfect E-Learning)
- CyberSecurity (Ratchart Grower FN Careers)