Umarani M

✉ umarani180305@gmail.com 📞 +91 9790034654 in umarani1835 🌐 portfolio 📍 Tiruppur

Summary

Aspiring Machine Learning Engineer and Backend Developer with strong skills in Python. Experience in building web applications using Django and integrating machine learning models into back-end systems. Familiar with working on databases, data processing and model development. Passionate about AI and web technologies, and excited to create real-world applications that combine both.

Work Experience

Quantum Computing Developer Intern   Apr 2024 – July 2024
KwantumG Research Labs Pvt. Ltd., Bangalore

- Collaborated with the research team to explore real-world use cases of quantum algorithms in classification, pattern recognition, and language understanding.
- Developed the backend of demo.kwantumg, a sandbox-style learning platform enabling beginners to experiment with quantum algorithms using popular frameworks.
- Built and maintained the platform using Django and PostgreSQL, ensuring scalable backend operations and smooth integration with quantum libraries.

Education

B.Tech in Information Technology - 8.71/10   2022 - 2026
KPR Institute of Engineering and Technology

Projects

demo.kwantumg Platform   demo.kwantumg.com

- Developed the back end of an interactive web platform designed to help beginners explore and experiment with quantum algorithms in a sandbox-style environment.
- Implemented Django-based backend architecture and integrated PostgreSQL for secure and efficient data management.
- Integrated multiple quantum computing frameworks to enable real-time experimentation and simulation of quantum circuits.

Legal Bert Advisor   legal_bert

- Designed and deployed a Flask-based Legal Bot Advisor that predicts whether a case is criminal or civil using a machine learning model.
- Implemented a lawyer recommendation system based on case type and district, improving legal accessibility and user experience.
- Built a secure user-lawyer communication interface with authentication for both roles, using HTML, CSS, JavaScript, and SQLAlchemy for full-stack functionality.

Potato Leaf Disease Prediction System   potato_disease

- Developed a web-based system for accurate prediction of potato leaf diseases using a trained CNN model.
- Implemented the backend using Django to handle data processing and model integration.
- Designed a responsive and user-friendly front end using HTML, CSS, and JavaScript.

Skills

Programming Languages: C, Python, Java (Basic)
Frameworks: Django, Flask, Qiskit
Databases / Tools: PostgreSQL, MySQL, Ubuntu, Figma, Canva
Version Control: GitHub
Soft Skills: Analytic Thinking, Team Coordination, Efficient Planning, Problem Solving

Achievements

- **Competitive Coding:** 5-star gold badge in Problem Solving (HackerRank), 200+ problems solved on Leet-Code.
- **Certifications:** Elite+Silver in Foundations of R Software (NPTEL), Git Foundations Certification.
- **Leadership:** Chair of IEEE Information Theory Society.