Prasad Botre

botreprasad474@gmail.com +91-8010681292 LinkedIn GitHub Portfolio

Summary

Dedicated and solution-oriented Electronics and Telecommunication Engineering student with a strong passion for software development. Proficient in Android app development, AI integration, and gesture-based automation systems. Enthusiastic about leveraging modern technologies like Jetpack Compose, React Native, and Machine Learning. Exploring Cloud Computing, Docker, and Linux-based systems.

Technical Skills

Programming Languages: Python, C++, Java, SQL
Core Concepts: Data Structures & Algorithms, OOP, Computer Networks, DBMS, Operating Systems
Frameworks & Tools: Flask, FastAPI (basic), Django , Git, GitHub, Linux, Docker
Databases: MySQL
Cloud Platforms: AWS (basic), GCP

Publications

Exploration and Optimization Technique for Speech Enhancement and Emotion Recognition Using Deep Neural Network *2025*

- Focuses on deep neural networks for speech enhancement in noisy environments
- Key Skills: Python,Scikit-learn, TensorFlow, Keras, PyTorch,Docker ,Kubernetes

Certifications

ANDROID14 Certification: Scored 79/100. Covered Java, Kotlin, Jetpack Compose, and database integration.

Education

Dr. D.Y. Patil Institute of Technology *Pune, India*
B.E. in Electronics and Telecommunication Engineering *Expected 2025*

- CGPA: 8/ 10

Projects

Electronic Component Detection App *2024*

- AI-powered Android app for identifying and classifying electronic components
- Backend integration to display specs, datasheets, and pinouts
- Tools Used: Android Studio, Kotlin, TensorFlow, MobileNetV2 ,Python,Scikit-learn, Kubernetes

Chat AI Application *2024*

- Developed AI chatbot with image query and smart camera support
- Built clean and responsive UI using Jetpack Compose
- Tools Used: Kotlin, React-native,Jetpack Compose, Gemini API,CI/CD

Emotion Recognition *2025*

- Deep learning model to recognize human emotions from speech
- Used audio features like MFCCs and spectrograms
- Integrated into Flask web app with Dockerized deployment
- Tools Used: Python, TensorFlow/Keras, Librosa, Flask, Docker

Gesture-Based Home Automation (IoT) *2023*

- Designed IoT-based gesture-controlled home automation system
- Used OpenCV for hand detection and ESP8266/NodeMCU for appliance control
- Integrated with Blynk App and voice assistants like Google Assistant Alexa
- Tools Used: Arduino, Python, OpenCV, Blynk, NodeMCU, IoT protocols (UART, WiFi)