Prasad Botre

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

Languages: C++,Java, Python,Sql,YAML,Bash

Frameworks/Technologies: TensorFlow, PyTorch, scikit-learn, Flask, Linux

Tools: GitLab , DevOps,CI/CD, Docker, Kubernetes

Publications

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

2025

- o Focuses on deep neural networks for speech enhancement in noisy environments
- Key Skills: Python, TensorFlow ,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

o CGPA: 7.85/10

Projects

Electronic Component Detection App 🗹

2024

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

Chat AI Application 🗹

2024

- o Developed AI chatbot with image query and smart camera support
- o Built clean and responsive UI using Jetpack Compose
- o 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
- o Integrated into Flask web app with Dockerized deployment
- o Tools Used: Python, TensorFlow/Keras, Librosa, Flask, Docker

Gesture-Based Home Automation (IoT)

2023

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

Hobbies

Trekking