

MANJURMAHAMAD KOVADIYA

Himmatnagar, Gujarat

☎ +91 85113 13429 | ✉ kovadiyamanjur@gmail.com | 🌐 Manjur Kovadiya | 📱 Manjur13 | 📖 Play Store | 📁 Portfolio

SUMMARY

Software Engineer specialising in AI/ML, Computer Vision, and scalable real-time systems, with experience building end-to-end solutions across edge devices and mobile platforms. Focused on solving real-world problems through efficient, production-ready engineering.

EDUCATION

Institute of Technology, Nirma University

2024 – Present

Master of Technology in Data Science (CGPA: 7.85)

Ahmedabad, India

Parul University of Engineering and Technology

2019 – 2023

Bachelor of Engineering and Technology (CGPA: 8.15)

Vadodara, India

PROJECTS

Kya Banau AI - AI Recipe Generator & Cooking Assistant

Mar 2026 – Present

Java OpenAI Whisper Hugging Face API n8n Firebase Retrofit REST APIs

- Users speak or type available ingredients; app returns personalised Indian recipes with step-by-step instructions, food images, and YouTube cooking references - **live on Google Play** with **multi-language support**.
- Voice pipeline: Whisper STT → HuggingFace food classifier → **JSON-schema-constrained LLM output**; backend runs entirely on n8n webhooks - **no dedicated server, no cold-start overhead**.

MyEventPics - Face-Based Event Photo Retrieval App

Mar 2026 – Present

Java TensorFlow Lite FaceNet HNSW ML Kit CameraX Google Drive API Firebase

- At weddings and events, guests scan their face once and instantly retrieve every photo they appear in - **no manual browsing**. Photos stay in the photographer's Google Drive; only 128-d FaceNet embeddings are indexed server-side, ensuring **zero raw image exposure**.
- **On-device TFLite inference** generates face embeddings; HNSW ANN index delivers **sub-second similarity search** across large galleries - **eliminating backend storage cost entirely**.

AI Smart Stick for Visually Impaired [GUJCOST Government Funded]

Jan 2025 – Apr 2025

Python YOLOv8 PaddleOCR OpenCV Raspberry Pi Android WebSocket

- Raspberry Pi-powered walking stick that detects nearby objects (YOLOv8) and reads real-world text like signboards and traffic signs (PaddleOCR) - streams **real-time audio navigation alerts** to an Android companion app over WebSocket.

Crime Scene Analytics - Forensic Evidence Detection

Jun 2025 – Present

Python YOLOv8 PyTorch Real-ESRGAN OpenCV Streamlit WebSocket Android

- Detects forensic evidence (weapons, bloodstains) in crime scene images and live Android camera feeds; results surface on a Streamlit dashboard - **custom-annotated dataset, research paper manuscript prepared for submission**.
- Real-ESRGAN super-resolution + augmentation pipeline improved **mAP@50: 0.53 → 0.61** and **small-object recall: 0.62 → 0.76**.

EXPERIENCE

Destov Tech

Apr 2023 – May 2023

Android Developer Intern (Remote)

India

- Built and shipped Android features in **Java** - integrated **Firebase** (auth, Firestore, storage) and **REST APIs** via Retrofit; worked within an Agile sprint cycle handling debugging and feature delivery.

Freelance Android Developer

2022 – 2024

7+ Client Projects Delivered

Remote

- **Shashank Finance** - Finance tracking app; Firebase auto-updates live balance dashboards for a local finance firm.
- **ExploreNearby** - Travel discovery app with Google Maps API, location-based hotel and attraction listings.
- **Blue Light Industry LLC** - Phase-wise workers log progress, supervisors monitor live across manufacturing stages.

TECHNICAL SKILLS

Languages: Python, Java, C, C++

AI / ML: Computer Vision, Deep Learning, NLP, Edge AI, Object Detection, On-device Inference

ML Frameworks: PyTorch, TensorFlow Lite, YOLOv8, FaceNet, Real-ESRGAN, HuggingFace, OpenCV, PaddleOCR

Data & Utilities: NumPy, Pandas, Scikit-learn, Streamlit, Jupyter Notebook

Android: Android SDK (Java), MVVM, Jetpack, CameraX, ML Kit, Retrofit, Firebase, WebSocket, REST APIs, Kotlin

Backend & Automation: n8n (webhook automation), Firebase, SQL, MySQL

IoT & Embedded: Raspberry Pi, MQTT, Bluetooth, Real-time Streaming

Tools: Git, Android Studio, Linux, VS Code, PyCharm