

Ayush Khanuja

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LinkedIn – GitHub

EDUCATION

BMS College of Engineering

Bachelor of Engineering in CSE (Data Science) (CGPA: 9.13/10)

Bengaluru, Karnataka
Dec 2023 – Present

Matoshri Junior College

Higher Secondary Certification (12th) (Percentage: 84.17)

Nashik, Maharashtra
April 2022 – March 2023

PROJECTS

Meet-AI - AI-Driven SaaS Video Intelligence Platform

GitHub | Live

Next.js 15, OpenAI Realtime API, Stream SDK, Inngest, tRPC, Drizzle ORM, Better Auth, Polar

- Architected a high-performance video conferencing SaaS utilizing OpenAI's Realtime API and Stream SDK to deliver sub-500ms latency in AI-human voice interactions and automated meeting coaching.
- Engineered an asynchronous, event-driven backend with Inngest and tRPC, automating complex workflows including live transcription, intelligent summarization, and multi-tenant data synchronization.
- Implemented a production-ready security and monetization layer using Better Auth and Polar, managing secure user sessions and automated subscription billing for a scalable, multi-tenant ecosystem.

Quick Bites - Full-Stack Food Delivery & Operations Ecosystem

GitHub | APK

Kotlin, Android SDK, Supabase (Postgres, Realtime, Auth, Storage), MVVM, Coroutines, Retrofit

- Developed a dual-application ecosystem comprising a customer ordering platform and a dedicated Admin console, synchronized via Supabase Realtime for zero-latency order and inventory updates.
- Architected a secure relational database schema using Postgres Row Level Security (RLS), ensuring strict data isolation and enterprise-grade security for user records and transaction history.
- Optimized mobile responsiveness and network efficiency by implementing MVVM architecture and Kotlin Coroutines, significantly reducing main-thread blocking to ensure a fluid 60FPS user interface.

ClassLogger - Biometric Attendance & Security System

GitHub

Kotlin, Python (Fast API), Face Net, MTCNN, OpenCV, KNN, Firebase (Firestore, Auth), Retrofit

- Architected a multi-factor authentication system to eliminate attendance fraud, integrating FaceNet (Inception-ResNet-V1) 512-D facial embeddings with WIFI SSID/BSSID network validation.
- Engineered an AI-vision pipeline utilizing MTCNN for real-time face detection and KNN with Cosine Similarity for identity classification, achieving a 70%+ confidence threshold for automated verification.
- Built a secure, dual-interface mobile platform with real-time Firestore synchronization, featuring automated session management, administrative overrides, and biometric auditing for institutional compliance.

TECHNICAL SKILLS

Languages: Java, C, Python, JavaScript, SQL, R, Kotlin

Libraries and Frameworks: Flask, Pandas, NumPy, Matplotlib, TensorFlow, Keras, Node.js, Express.js, React.js

Tools: PostgreSQL, MongoDB, Neo4j, Firebase, Vercel, Docker, GitHub

Coursework: Data Structures and Algorithms, Operating Systems, Database Management Systems, Machine Learning, Deep Learning, Cloud Computing, Big Data Analytics.

POSITION OF RESPONSIBILITY

IEEE Signal Processing Society (SPS)

June-Nov 2024

Junior Core Member

- Spearheaded technical workshops and events, securing high engagement scores and positive feedback.
- Developed strategic industry partnerships and connections to drive collaborative networking.