MOHIT GUJARATI

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SUMMARY

Innovative Software Engineer specializing in Mobile (Android/Kotlin) and Web (React.js) development with a focus on AI/ML integration. Proven track record of building privacy-first applications leveraging Generative AI and NLP, and currently pursuing an M.S. in Computer Science, combining strong system design skills with expertise in deploying scalable, on-device intelligent solutions.

EDUCATION

Master of Science in Computer Science   **Sep 2024 - May 2026**
Long Island University , Brooklyn   **GPA 3.8/4.0**
Bachelor of Technology in Engineering   **2016-2020**
Shankersinh Vaghela Institute of Technology, Gujarat   **3.1/4.0**
Coursework: *Artificial Intelligence, Machine learning and Pattern Recognition, Deep Learning, Python, System Design and analysis, Java, JavaScript, SQL, No-SQL, MongoDB, Object-oriented programming, Data Structures and Algorithms*

SKILLS

- **Programming Languages:** Kotlin, Java, Python, TypeScript, JavaScript
- **Android Development:** Native Android (SDK), XML Layouts (View System), Coroutines, Jetpack Components (ViewModel, Navigation, LiveData), Room Database, Retrofit, MVVM Architecture.
- **AI & Machine Learning:** Generative AI (Gemini API, Flan-T5), NLP (SBERT, Hugging Face Transformers), Vector Embeddings, Cosine Similarity, Scikit-learn.
- **Backend & Web Technologies:** React.js, Flask, Styled-Components, HTML5/CSS3, RESTful APIs.
- **Database & Tools:** Docker, Git/GitHub, Firebase (Auth/Firestore), Android Studio, SQL, MongoDB, Postman.

PROFESSIONAL EXPERIENCE

Software Engineer, TNM Software Solutions   May 2023 - June 2024
- **Accelerated** product delivery by shipping **4 production-ready applications** in just **8 months**, utilizing **Kotlin** and **React Native** to reduce cross-platform development time by **~20%**. **Boosted** application performance by **50%** by refactoring legacy code into **MVVM architecture** and implementing **Kotlin Coroutines** for non-blocking I/O, significantly reducing UI latency.
- **Engineered** battery-efficient location services using **Google Geofencing API** and **Motion Sensors**, optimizing GPS polling intervals to reduce device power consumption by **30%**.

Android Developer Trainee, Tops Technology Inc.   May 2022 - 2023
- Built and deployed full-stack native Android applications in Kotlin, delivering features that increased user satisfaction and engagement. Designed optimized database solutions and streamlined API integrations, improving app performance and reliability.

PROJECTS:HTTPS://GITHUB.COM/MOHITGUJARATI

Twin AI – Intelligent Meeting Assistant | *Kotlin, Jetpack Components, Room, Firebase, Material Design, MVVM, GIT* | Code Link
- **Architected** an **offline-first sync engine** using **Room Database**, a privacy-centric architecture using **Room Database**, ensuring **100% data availability** and user privacy by storing sensitive meeting transcripts locally. **Integrated Google Gemini 1.5 Flash** via **Retrofit** to generate context-aware summaries and action items, reducing post-meeting review time by **~40%** for users.
- **Engineered** a responsive chat interface using **XML Layouts** and **ViewBinding**, utilizing **Kotlin Coroutines** to offload heavy DB operations and maintain **UI smoothness**.
- **Implemented** continuous voice processing using **Android Speech Recognizer**, adding custom error-handling logic to prevent recording interruptions during long sessions.

The Cognito Times-AI News Recommender System | *React.js, Python, Flask, SBERT, Firebase* | Code Link | Deployed-Demo
- **Engineered** a hybrid recommendation engine using **Sentence-BERT (SBERT)** and **Maximal Marginal Relevance (MMR)**, increasing content diversity by **~30%** and eliminating filter bubbles through semantic vector re-ranking.
- **Built** a scalable architecture with **React.js**, **Flask**, and **Docker**, serving real-time personalized predictions with **sub-second latency (<200ms)** via optimized RESTful APIs. **Developed** a dynamic weighted fusion algorithm (60% explicit / 20% implicit signals) using **Firebase Firestore**, enabling instant feed adaptation based on live user interactions.
- **Integrated Google Flan-T5** LLM via **Hugging Face Transformers** to auto-generate concise context-aware summaries, reducing user information overload and enhancing content discoverability.

Fleet Tracker – Real-time Fleet Monitoring | *Kotlin, Realm, Google Maps, Geocoder, Geofences, Motion sensor, S.O.L.I.D, GIT*
- Developed Android app for real-time fleet tracking with Google Maps, Geofencing, and motion sensor–based incident detection.
- Used Realm Database for secure storage of safe zones, travel history, and user activity with fast retrieval. Applied SOLID principles, multi-threaded approaches using Kotlin Coroutines, improving app performance and maintainability by 40%.

InEvents – Event Management System | *Kotlin, Firebase notification & database*, *SQLite, PHP, JVM, MySQL, Retrofit, MVVM*
- Deployed an event management app on **Google Play Store (500+ downloads)** using Kotlin and Firebase, achieving 100% paperless registration for **200+ daily** active users. The app was unlisted after my graduation because it was not updated frequently.