

# Muhammad Abdullah Butt

## AI Researcher & Full Stack Software Engineer

Gujranwala, Punjab, Pakistan

Email: [abdullahbutt3579@gmail.com](mailto:abdullahbutt3579@gmail.com) | Phone: 0312-7797897

LinkedIn: [www.linkedin.com/in/muhammad-abdullahbutt](https://www.linkedin.com/in/muhammad-abdullahbutt) | GitHub: <https://github.com/Abdullahs-git>

### Professional Summary

---

Strategic AI Researcher and Full Stack Engineer with 3+ years of experience. Pioneer of MAPF-Lite, a parameter efficient framework for high fidelity Deepfake detection (Under Review: FLINS-ISKE Journal). Expert in bridging the gap between SOTA research and production scale ecosystems, backed by Oracle Cloud and IBM certifications in Generative AI and Computer Vision.

### Education

---

#### Bachelor of Science in Computer Science

GIFT University, Gujranwala, Pakistan

Graduation: 2026 | CGPA : 3.20/4.0

### Technical Skills

---

**AI & Research:** PyTorch, Keras, OpenCV, Vision Transformers (ViTs), Multimodal Fusion, Model Quantization, Zero Shot, Scikit learn, CNN Transformer Hybrids, PEFT, NLP, Spatial Residual Modeling (SRM).

**Web & Mobile Development:** Next.js (App Router), TypeScript, React, React Native (Expo), Node.js, Express, Prisma ORM, Tailwind CSS.

**Cloud & Data:** Supabase, PostgreSQL, MongoDB, Firebase, REST APIs, Git/GitHub, Vercel, Railway, Docker, Postman, Requestly, Oracle Cloud Infrastructure (OCI).

### Experience

---

#### Full Stack Software Engineer | MAQ Enterprises | Jan 2023 – Feb 2026

- **System Architecture:** Engineered and maintained scalable web applications using Next.js, Node.js, and Prisma, transforming complex user requirements into high performance production systems.
- **Database & API Design:** Optimized PostgreSQL and MongoDB schemas and implemented secure RESTful APIs, improving data retrieval speeds and ensuring system robustness.
- **Full Stack Leadership:** Led the development of frontend interfaces and backend logic, collaborating with cross functional teams to deliver digital products under tight deadlines.

#### AI Researcher (Undergraduate) | Jan 2024 – Present

- **Novel Architecture:** Engineered a multimodal architecture utilizing Clip and whisper Vision Transformers (ViTs) to identify audio visual manipulations with high precision.
- **Performance Optimization:** Outperformed SOTA benchmarks by optimizing model parameters and FLOPs, ensuring efficiency for edge device deployment.
- **MAPF-Lite Framework:** Engineered a parameter-efficient multi-modal framework for Deepfake detection, reducing trainable parameters by 99.6% (to 0.566M) using frozen CLIP and Whisper backbones.
- **Publication:** "MAPF-Lite: A Parameter Efficient Multi Modal Framework for High-Fidelity Deepfake Detection" Under Review: FLINS-ISKE Journal.

#### AI & ML Intern | YoungDev Intern | Oct 2025 – Nov 2025

- **Model Application:** Applied Machine Learning models to solve real-world datasets, focusing on classification and predictive analysis.

- **Remote Collaboration:** Contributed to a distributed team environment, following Agile methodologies to deliver practical AI/ML portfolio projects.

### **Full-Stack Developer | ESTABRAQ (Fashion Brand) | Current**

- **Architecting an Ecommerce Ecosystem:** Developing a high performance web platform using Next.js (App Router) and TypeScript to enhance brand presence and user conversion.
- **Database & Backend:** Implementing Prisma ORM with Supabase for real time data management, secure authentication, and scalable storage.
- **Cross Platform Expansion:** Engineering a companion mobile application (in progress) using React Native to provide a seamless omnichannel shopping experience.

## **Projects**

---

### **Estabraq Brand Platform | Next.js, Prisma, Supabase, Tailwind CSS**

- **Scalable Ecommerce Architecture:** Architecting a high performance web ecosystem for a premium fashion brand, utilizing Next.js App Router for optimized SEO and Server Side Rendering (SSR).
- **Real-time Data & Auth:** Implementing Supabase for secure user authentication and Prisma ORM with PostgreSQL to manage dynamic inventories and customer orders.
- **Omnichannel Strategy:** Developing a companion React Native mobile application to ensure a seamless, unified shopping experience across web and mobile platforms.

### **MAPF-Lite: Deepfake Detection System | PyTorch, CLIP, Whisper**

- **Innovation:** Implemented a **Forgery Signature Gate** using SRM/DCT filters to capture GAN and Diffusion-based fingerprints.
- **Explainable AI:** Integrated XAI modules providing visual heatmaps and frame-level suspicion scores for forensic transparency.
- **Efficiency:** Maintained a peak memory footprint of 1.1 GB, enabling deployment on edge/mobile devices.

### **Telemedicine Ecosystem | React Native (Expo), Firebase, Context API**

- **Multi Role Architecture:** Engineered a cross platform system featuring a Patient/Doctor mobile app and a comprehensive Admin Dashboard for healthcare governance.
- **Dynamic Resource Management:** Developed a robust Doctor Slot Management system with realtime booking synchronization and practitioner onboarding workflows.
- **AI Integration:** Implemented an AI powered diagnostic scan for initial patient assessments using computer vision logic.
- **System Resilience:** Leveraged Context API for global state management and implemented Error Boundaries to ensure a crash resistant, production grade user experience.

## **Certifications**

---

### **Cloud & AI Certifications:**

- OCI 2025 Certified Generative AI Professional (Oracle).
- OCI 2025 Certified AI Foundations Associate (Oracle).
- NLP and Computer Vision Specialist (IBM).
- Generative AI: Language Modeling with Transformers (IBM).
- Machine Learning using Python (IBM).

### **Software Development (Simplilearn):**

- MERN Stack Development.
- ReactJS for Beginners.

