

Danish Humair

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EDUCATION

The University of Texas at Dallas (UT Dallas)	MS in Computer Science	Aug 2025 – May 2027
Lahore University of Management Sciences (LUMS)	BS in Computer Science	Aug 2021 – May 2025

PROFESSIONAL EXPERIENCE

Summer Engineering Intern | Play Anything (formerly Songscription) | May 2026 – Aug 2026
Tools: React Native, TypeScript, Expo, Swift/Metal, Supabase, PostgreSQL San Francisco Bay Area, USA

- Owned major areas of **Anything Piano**, a music-education app, as **one of two engineers on a 3-person core product team**, working directly with the CTO and CPO to take it from pre-beta to public iOS launch.
- Completed **115 product tickets and shipped 80+ merged PRs in 9 weeks** across practice scoring, MIDI/audio playback, piano-roll interactions, native Swift/Metal rendering and performance optimization, onboarding, and search/library flows, leveraging **AI coding agents** (Claude Code) to accelerate implementation and debugging.
- Built **end-to-end features across the React Native client, Supabase/PostgreSQL backend, and native iOS layer**, spanning learning/scoring systems, content workflows, and backend scheduling/batching for re-engagement notifications.
- Independently translated high-level product direction into production features & proposed product concepts adopted into roadmap.

Founding Engineer | Clinpax | Apr 2025 – Jul 2025
Tools: Next.js, FastAPI, Microsoft Azure, AWS, OpenAI APIs Melbourne, AU (Remote)

- Solo engineer** who designed, built and shipped a real-time AI medical scribe from scratch, now in active use in real medical consultations by GPs in Australia, Saudi Arabia and Pakistan; the current team continues to build on my architecture.
- Designed and implemented a **multi-agent AI system** generating clinical insights under healthcare safety constraints.
- Built a GP-annotated **evaluation framework** across 50+ consultations to benchmark and refine clinical insight generation.
- Developed a **low-latency real-time transcription & diarization pipeline**, benchmarked accuracy and latency against alternatives.

Software Engineer & Project Lead | AI for Healthcare Initiative at LUMS | Dec 2023 – May 2025
Tools: Android Studio, Figma, Adobe XD, Firebase Realtime Database Lahore, PK

- Built an Android app from the ground-up, enabling migraine patients to log episodes and triggers, supporting ML-based onset prediction from passive sensor streams; scaled to **100+ early signups**.
- Designed UI/UX through iterative testing, leading **focus groups with patients** to improve usability during migraine episodes.
- Promoted to project lead in Jan 2025; led a **15-member cross-functional team**, assigning tasks, mentoring members, and aligning execution with research goals.
- Built a dashboard for doctors to view their patients; maintained projects through bug fixes, feature updates, and CI/CD pipeline.

RESEARCH & TEACHING EXPERIENCE

Graduate Researcher | Design & Engineering For Making Lab at UT Dallas | Feb 2026 – **Present**

- M.S. Thesis**, advised by Dr. Liang He: Automated LLM-driven pipeline for CAD generation of mechanical parts.
- Previously developed camera-based 3D spatial reconstruction pipeline for an assistive robotic wearable.

Research Assistant | Internet, Data and Society Lab at LUMS | May 2024 – Jul 2025

- Co-first author**, "Quality-Preserving Extreme Image Compression: Using Interpretable Conditioning Inputs with Diffusion Models" Shayan Ali Hassan, **Danish Humair**, Ihsan Ayyub Qazi, Zafar Ayyub Qazi [[ECML-PKDD '25](#)] [CORE A; 24% acceptance]

Teaching Assistant | "CS 6303 – Topics in Large Language Models" at LUMS | Jun 2024 – Dec 2024

- Advised research projects for 48 undergraduate and graduate students; designed and graded programming assignments.

SELECTED PROJECTS

- PivotHCl**: Designed & evaluated a new non-linear LLM chat paradigm; showed higher perceived control than linear chat | 2026
- Journaly.io**: Co-founded privacy-focused mood tracker; built high-performance React Native drag-and-sort system | 2024
- LLM4LLU**: Voice2Voice WhatsApp AI bot for low-literacy users; reached 500+ users in 72 hrs | 2023
- Built Chrome extensions for LUMS students, adopted by 150+ students within first 2 weeks | 2022
- Open Source**: Contributed features & bug fixes to Seerr, Submittly, yt-dlp, and others, spanning authentication, API integrations, backend logic, media tooling & application bugs

SKILLS

- Languages**: Python, C++, TypeScript, JavaScript, Swift, Go, SQL, C
- Frameworks**: PyTorch, TensorFlow, OpenCV, React/React Native, Node.js, FastAPI, Next.js, Supabase, Postgres
- Dev & Cloud**: Git, Linux, CI/CD, AWS, Azure, Claude Code, AI-Assisted Development
- Creative**: UI/UX Design, Figma, Adobe Creative Suite, 3D Modeling, Audio/Visual Production, Music Production & Mixing