

# FATIMA MAMU

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## PROFESSIONAL SUMMARY

Product Engineer with 5+ years of experience building and shipping user-facing systems. Specializes in real-time interaction workflows and full-stack feature development.

## WORK EXPERIENCE

### **Product Engineer - Lexi AI | Sept 2025 - Present**

- Architected frontend state management and asynchronous interaction flows for real-time clinical interpretation workflows deployed across 4 hospital pilots, coordinating speech input, backend processing, and audio playback without UI blocking.
- Designed non-blocking request handling and structured loading/error states to maintain stable clinician sessions during live patient encounters.
- Partnered with founders to define and ship end-to-end user-facing features (frontend, backend integration, analytics), aligning system behavior with existing clinical workflows and healthcare compliance requirements.

### **Software Development Intern (Creative Technology) - Disney Research & Development | 2024**

- Built performance-sensitive interactive systems in Unity integrating multi-sensor inputs (eye tracking, hand tracking, projection mapping) under real-time constraints.
- Developed synthetic dataset generation tools to accelerate computer vision experimentation and iterative prototyping.
- Contributed to robotics-driven show illusion testing and calibration in production-grade deployment environments.

### **Engineering Associate (Software & Systems Prototyping) - The Business People Limited, Abuja, Nigeria | 2019 - 2023**

- Designed and built full-stack prototypes for government-adjacent systems, integrating payment flows, authentication models, and dashboard analytics.
- Led rapid prototyping cycles from wireframes to deployed MVPs, aligning technical implementation with economic inclusion objectives.
- Architected modular backend services and database schemas to support scalable transaction and reporting workflows.

### **Founder & Creative Director - Edible Art Studio | 2013 - 2023**

- Built and scaled a 15-person creative production studio serving enterprise and high-volume clients, managing operations, budgeting, and cross-functional execution.
- Designed and iterated customer-facing product offerings based on demand signals and market positioning.
- Implemented process and systems optimizations to increase output capacity and operational efficiency.

## TECHNICAL SKILLS

**Programming Languages:** Python, JavaScript, C#, Typescript

**Frontend:** React, Next.js, State Management, Async UI Patterns

**Backend & Web Systems:** Next.js, Node.js, REST APIs, authentication flows, HTTP/JSON

**Databases & Data:** SQL, PostgreSQL (Supabase), basic schema design, data modeling

**Applied AI & Data (Engineering):** Model training workflows, RAG pipelines, vector search integration, synthetic data generation

**Tools:** GitHub, VS Code, Supabase, Unity, CI/CD-style build workflows

## EDUCATION

**Harvard University**, Cambridge USA – Master in Design Engineering

**University College London**, London UK – Diploma in Computer Graphics, Vision and Imaging

**Brunel University**, London UK – BEng, Electrical and Electronics Engineering