FATIMA MAMU

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PROFESSIONAL SUMMARY

Product Engineer with over 5+ years of experience building interactive web experiences, internal tooling, and customer-facing features across entertainment and AI-driven products. Proficient in React/Next.js, TypeScript, Webflow, and design systems, with a track record of translating design intent into production-ready code and building tools that help teams move faster.

EDUCATION

Harvard University, Cambridge, USA — Master in Design Engineering   *2023 – 2025*
University College London, London, UK — Diploma in Computer Graphics, Vision and Imaging   *2015 – 2016*
Brunel University, London, UK — BEng, Electrical and Electronics Engineering   *2010 – 2013*

WORK EXPERIENCE

AI Product Engineer | Lexi AI, Boston, MA, USA | *2025 – Present*

- Developed and shipped customer-facing interpretation features in Next.js, including audio intelligence logic to distinguish speech from background noise, real-time visual cues, and workflow-integrated controls — contributing to 40% increased clinical efficiency across 4 facilities and 7,000+ completed conversations.
- Conducted on-site user research with clinicians across pilot facilities, translating workflow observations into targeted UX improvements that reduced interaction friction within existing clinical processes.
- Built and launched Lexi's marketing website and blog, owning branding, design system implementation and iterative redesigns across multiple release cycles.

Software Development Intern (Creative Technology) | Walt Disney Imagineering (R & D), Glendale, CA, USA | *2024*

- Built internal productivity tools including a synthetic dataset generation pipeline for 6DOF pose estimation and an AR environment for pre-production staging, reducing setup time and minimizing errors during physical production.
- Developed real-time interactive experiences for Disney attractions using Unity, Maya, and TouchDesigner, including a guest-driven water simulation for the Moana Journey of Water exhibit at D23 that translated full-body motion tracking into responsive visual effects.
- Contributed to a glasses-free 3D display system for theme park attractions, designing and animating test scenes in Maya, integrating hand-tracking input into TouchDesigner, and evaluating system strengths and limitations to inform final creative direction.
- Integrated robotics, real-time animation, and physical staging for a show-ready illusion involving a Kuka robot, syncing TouchDesigner animations to LED outputs and supporting calibration and mechanical setup, presenting final results directly to CEO Bob Iger for project continuation approval.

Engineering Associate (Software & Systems Prototyping) | The Business People Limited | *2019 – 2023*

- Designed and developed client-facing web platforms across multiple industries, including full-stack management systems built with Next.js and TypeScript, implementing role-based authentication, transactional booking workflows, and a normalized PostgreSQL schema supporting hundreds of active users.
- Conducted on-site user research and workflow analysis to identify automation opportunities, translating observations into software prototypes and system recommendations for clients across agriculture, aviation, and healthcare sectors.

Founder & Creative Director | Edible Art Studio, Nigeria | *2013 – 2023*

- Founded and operated a bespoke cake design studio for 10 years, managing end-to-end client relationships, creative briefs, production timelines, and a team of 15 across thousands of commissioned projects.
- Developed systems and processes for managing client intake, custom order workflows, and supplier relationships, scaling the business sustainably over a decade.

TECHNICAL SKILLS

Frontend & CMS: React · Next.js · TypeScript · Tailwind CSS · Webflow · Figma · design systems
Backend & Creative Tech: Node.js · REST APIs · PostgreSQL · Supabase · Python · C# · Unity · TouchDesigner · Maya
Applied AI & Data (Engineering): Model training workflows · RAG pipelines · vector search integration · synthetic data generation · Pre-training · Post-training · Fine-tunning
AI Tools: Claude code · OpenAI · Gemini · Perplexity