

UMME FATIMA SADIA HOSSAIN

AI & BACKEND SOFTWARE ENGINEER

Bangladesh | Open to relocation | fatimasadiahossain@gmail.com

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Professional Summary

Software Engineering graduate building responsible AI and backend systems for healthcare, public services, risk intelligence, and resilient communities. Experienced with Python, FastAPI, Django, RESTful APIs, PostgreSQL, retrieval-augmented generation, and multi-agent workflows, with a research interest in evidence grounding, uncertainty, and human oversight.

Education

BSc (Hons) Software Engineering — Dual Award | Asia Pacific University of Technology & Innovation and De Montfort University

Kuala Lumpur, Malaysia | Mar 2022–Feb 2026 | English-medium programme

Professional Experience

Project Management Intern | APU Career Centre | May 2024–Aug 2024

- Completed a 16-week internship coordinating career-fair and student-programme operations across internal teams and external stakeholders while maintaining schedules, data accuracy, and delivery milestones.
- Produced website prototypes and interface improvements for stakeholder engagement and supported structured Agile collaboration across programme activities.

Resident Assistant | The Purple House Hostel / INTI International College Subang | Oct 2019–Nov 2020

- Supported international and first-year residents through transition programmes, community activities, incident reporting, and day-to-day pastoral guidance.

Selected Projects

GharDisha AI | USAII Global AI Hackathon 2026 Finalist | React, FastAPI, RAG

- Built a multilingual, source-grounded case interpreter that converts disaster-displaced families' housing narratives and document/photo inputs into PMAY-G preparation plans while preserving explicit human authority boundaries.

Sentinel Web-Risk Intelligence | FastAPI, CrewAI, Bright Data, ChromaDB

- Designed a six-agent third-party risk workflow for live reconnaissance, verification, prediction, and auditable reporting using containerized services.

Gamified Habit Tracker | Final-year research project, submitted 30 Apr 2025 | Django, PostgreSQL, Docker

- Engineered a research-informed habit system with secure authentication, configurable goals, streaks, badges, reminders, Chart.js insights, and automated tests.

SenoNav AI | Python, Streamlit, RAG

- Developed an evidence-aware workflow for report ingestion, structured triage, referral readiness, multilingual guidance, and explicit human escalation.

Certifications & Recognition

USAII Global AI Hackathon Finalist (Undergraduate level, 2026) | **Google Cloud Gen AI Academy APAC 2026 — Cohort 2** (Google Cloud / Hack2skill, completion) | **Cisco AI Technical Practitioner** (Cisco) | **Cisco AI Business Practitioner** (Cisco)

Technical Skills

Backend: Python, FastAPI, Django, RESTful APIs, PostgreSQL, SQLite

AI & Data: RAG, machine learning, multi-agent workflows, Gemini, Qwen, CrewAI, Google ADK, ChromaDB, GIS

Engineering: Docker, Git/GitHub, CI/CD pipelines, unit testing, Agile, Kanban, AWS, React, Next.js, Streamlit, JavaScript