AFFAN IMRAN

portfolio | affan1708@gmail.com | linkedin.com/in/affan-imran | github.com/affzzn

EDUCATION

The University of Manchester

Manchester, UK

BSc (Hons) Computer Science | Predicted: First Class

September 2023 - July 2026

Modules: Data Structures and Algorithms, Databases, Distributed Systems, Computer Engineering, Computer Architecture, Operating Systems, Artificial Intelligence, Machine Learning, Natural Language Processing

Leadership: Public Relations Lead & Events Officer (UniCS MCR), PASS Leader

EXPERIENCE

Teaching Assistant

October 2025 – Present

The University of Manchester

Manchester, UK

• Tutored 40+ first-year students in COMP12111 Fundamentals of Computer Engineering labs, debugging **Verilog** code and guiding the simulation and implementation of **digital circuits**.

Software Engineer Intern

August 2025 – present

Markaba

Remote

- Integrated external insurance APIs into **Django** backend for digital policy issuance and quote generation.
- Developed a secure down payment gateway using **Stripe** and Django to manage the end-to-end transaction flow.
- Engineered scalable Python (Scrapy) and PostgreSQL pipelines to automate data extraction, and a React dashboard to provide data visualization for automotive marketplaces.
- Authored product guides, creating a knowledge base resulting in a 20% reduction in support tickets.
- Collaborated in an agile team, contributing code reviews and daily stand-ups to accelerate delivery.

Software Engineer Intern

July 2025 – August 2025

Imago Software

Manchester, UK

- Developed features for IMPRESS2, a clinical decision support tool for oncologists treating ovarian cancer.
- Automated testing and deployment with CI/CD pipelines using GitHub Actions, Docker, and DigitalOcean.
- Created a shared REST API interface and testing suite (Jest, Playwright, Lighthouse) to streamline development.

Software Engineer Intern

June 2024 – October 2024

Itifaq AI

Dubai, UAE

- Built a web scraping pipeline with **Selenium** & **BeautifulSoup** to process unstructured legal data for AI.
- Developed **REST API** controllers with **TypeScript** and **Express.js** to handle user requests and file uploads.
- Accelerated front-end development velocity by building a library of 15+ reusable **React** components.
- Utilized React Query for asynchronous data fetching and state management, optimizing data retrieval speed.

PROJECTS

PeerShare | Java, React, TypeScript

GitHub

- Developed a core Java P2P file sharing application with temporary invite codes for direct transfers.
- Engineered a multi-threaded backend using an ExecutorService for concurrent API requests.
- Implemented a direct P2P transfer layer using Java's low-level ServerSocket and Socket APIs.
- Built a custom multipart parser from scratch to process raw HTTP file uploads.

Muzer | TypeScript, Next.js, Socket.IO, Redis, PostgreSQL

GitHub

- Built a collaborative music room with real-time queuing, voting, and playback using Web Sockets.
- Used Redis Pub/Sub to sync WebSocket events across distributed instances, supporting horizontal scalability.
- Cached queue and track state in Redis to reduce PostgreSQL queries and improve performance.

AskSQL | Python, Streamlit, LangChain, Gemini API, MySQL

GitHub

- Developed a web interface that enables users to interact with MySQL databases using natural language queries.
- Engineered a backend pipeline using LangChain to generate SQL queries from user input and the Google Gemini API to convert the results into human-readable responses.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, Java, C, C++, HTML/CSS

Frameworks/Libraries: React.js, Next.js, Node.js, Express.js, Django, Socket.IO, Tailwind, pandas, NumPy

Databases: MySQL, PostgreSQL, MongoDB, Redis

Tools & Platforms: Docker, DigitalOcean, Firebase, Appwrite, Git, Postman, Jest