High Wycombe 07505822779 marwan.khaj@hotmail.com

Marwan Haj Mohamed

Computer Science

https://marwanhaj.vercel.app/ https://www.linkedin.com/in/marwan-haj

Nationality: British

Summary

- Experience developing software using languages such as React, Python, TypeScript, JavaScript, and MySQL.
- Experienced in designing, building, testing, and supporting innovative web applications using modern stacks like **MERN**, as demonstrated in *Jaceen* where I developed a full-featured e-commerce platform.
- Strong understanding of **UI/UX** best practices and **responsive** design, ensuring intuitive and accessible user experiences across all devices, shown in projects such as *Jaceen*.
- Proven experience working within **cross-functional** and **Agile** development teams, collaborating closely with designers, product managers, and engineers to deliver high-impact solutions.
- Developed award-winning platforms like Healio, an Al-powered disease prediction app using Python, React, and MySQL, presented at Made in Brunel to 100+ attendees and awarded for innovation.

Education

09/2021 - 05/2024

BSc in Computer Science (First Class Honours)

Brunel University

London, UK

• Software Engineering, Artificial Intelligence, Software Development Management, Algorithms

Recent Employment

02/2025 - 04/2025

Freelance Full Stack Developer (contract)

Journal of the Preelance Full Stack Developer (contract)

Jaceen

London, UK

- Collaborated with a healthcare company to design and build an e-commerce web application using the **MERN** (MongoDB, Express, React, Node.js) stack as well as **TypeScript**.
- Utilised **Material UI** to build a consistent, responsive, and accessible component-based UI, accelerating development and improving user experience.
- Optimized product loading performance by implementing caching strategies to reduce redundant API calls, cutting backend requests by 40%.
- Developed secure **user** and **admin** role management with **authentication** and **authorization** using **JWT**, utilising **Context API** to manage different states of users.

Employment History

09/2024 - 12/2024

Freelance Frontend Developer (contract)

JanaHealthCare (JHC)

London, UK

- Partnered with a dermatology company to design and launch a **React-based** web application, resulting in the successful acquisition of **15+** new customers.
- Designed and implemented modular, reusable components using React Hooks, improving development efficiency and long-term scalability.
- Ensured **cross-browser** compatibility and **responsive** design across desktop and mobile, enhancing **user experience** and **accessibility**.

08/2022 - 05/2024

Frontend Developer

Brunel Talent Marketplace (BTM)

London,UK

- Launched *BTM*, a university consultancy service, using **React** with a team of 3 engineers in an agile environment, providing consultation to startups and SMEs.
- Delivered **3** full-featured **web applications** (*HecoCalc, HecoCost, HecoRep*) for *HecoAnalytics*, driving a **30% increase** in customer satisfaction through enhanced functionality and user experience.
- Participated in code reviews, sprint planning, and user feedback sessions, promoting a collaborative development environment.

12/2022 - 05/2023

Frontend Developer

HecoCalc

London, UK

- Built and deployed a cost-analysis platform, increasing client efficiency by 25%.
- Reverse-engineered Excel models to build custom **algorithms** for automated financial simulations and sensitivity analysis.
- Worked with cross-functional teams to translate figma designs into a multi-page web application using React and
 React D3 Tree
- Stored user details in AWS Cognito and JSON files in S3 buckets, focusing on scalability and reliability.

07/2023 - 08/2023

Freelance Frontend Developer

AlMadani

London, UK

- Collaborated with a rental agency to develop a mobile application using **React Native**.
- Gathered and analysed requirements, ensuring app development aligned with business objectives, resulting in **30**% increase of service usage within the first three months.
- Designed wireframes using Figma to create a clear visual structure of the user interface.

- Developed a responsive **single-page** application for an engineering consultancy, enhancing user experience and accessibility across devices, resulting in a **200+** user increase in customer engagement.
- Boosted application performance by integrating lazy loading, reducing initial load times by 30%.

Projects

11/2023 - 02/2024

Full Stack Developer with Al

London, UK

- Developed a Random Forest Classification model to predict a disease from given symptoms, and integrated it with a user interface built in **React**.
- Implemented an algorithm in **Python** to extract symptoms from text, achieving **80% accuracy** through rigorous testing and optimisation.
- Developed **RESTful API** endpoints in **Python** using **Flask**, enabling the frontend to access the model for disease prediction, ensuring efficient and accurate data communication.
- Stored user details and conversations using **Spring Boot** and **MySQL** to personalise user experiences and improve system performance, enhancing engagement and retention.

09/2022 - 03/2023

Full Stack Developer

EduNotes

Healio

London, UK

- Built a **full-stack web application** enabling users to post, share, and rate notes, driving collaboration.
- Created **RESTful APIs** for user authentication, note management, and ratings, ensuring smooth front-end and back-end integration.
- Worked closely with other developers in the team in an agile environment, as well as stakeholders to gather requirements.
- Conducted **30+ unit tests** to ensure the project functioned as intended under various conditions.

11/2021 - 03/2022

Software Developer

Airport Simulation System

London, UK

- Collaborated in a team to design and develop an **Airport Simulation System** as part of a first-year university project, using the **Waterfall** development methodology.
- Conducted **requirements analysis** and system design sessions to define the scope and functionalities of the simulation.
- Implemented the application using **Java** with the **SWT** (Standard Widget Toolkit) to create an interactive, GUI-based simulation environment.
- Performed **unit and system testing** to validate the simulation logic and ensure smooth user interaction, followed by bug fixing and refinements during the maintenance phase.
- Gained hands-on experience in **team-based software development**, including documentation, version control, and structured communication through each Waterfall phase.

Other Work

03/2024 - Present

Youth Worker

Action4Youth

High Wycombe, UK

- Worked as a Youth Worker at Action4Youth, providing mentorship, guidance, and support to young people
- Collaborated with diverse stakeholders to develop and implement educational programs.
- Translated complex concepts into accessible content for young people.
- Adapted activities and approaches based on participants' needs and learning styles.
- Worked effectively within cross-functional teams to organize events and initiatives, building collaboration skills.

Skills

Languages
Tools/Database

React, TypeScript, Python, JavaScript, Node.js, Java, RESTful APIs

MongoDB, Git, AWS, Jira, Slack, MySQL, Figma, GitHub

Achievements

Winner - Made in Brunel

- *Made in Brunel* is a prestigious annual showcase at Brunel University where students from all years present their projects to a panel of judges and a public audience.
- To win, participants must effectively communicate and demonstrate their work through both a live presentation and display.
- I presented my final year project, **Healio**, to over 100 attendees and a panel of judges, highlighting its technical depth, design, and impact.
- My presentation impressed the judges and earned me the Winner's Certificate, awarded alongside my degree.