

Marwan Haj Mohamed

www.marwanhaj.vercel.app | marwan.khaj@hotmail.com | 07505822779

Summary

- Experienced in using **Python** for various projects including model training and **Natural Language Processing** applications such as Healio.
- Competent in **model training** techniques such as **Random Forest Classifiers** used to train the Healio chatbot.
- Proefficient in web technologies such as **ReactJS**, **HTML**, **JavaScript** and **CSS** through developing multiple projects such as EduNotes, BTM and Healio.
- Thorough backend knowledge using **Springboot** when developing EduNotes in my second year of university and Healio in my final year.
- Developed an airport booking system during my first year at university using **Java**.
- Advanced knowledge in **Agile** methodology whilst leading the development team of HecoCost.
- Good understanding of **Waterfall** methodology developed during the implementation of the airport system in my first year.
- Enhanced my **problem-solving** skills by individually developing a personal portfolio website which showcases my skills, projects and more.
- Natural ability to **communicate** with the customer through **listening** and **understanding** their ideas and requirements.
- Demonstrated my ability to **lead** a team of students in our university group project.

Education

Brunel University Level 3

(2023-2024)

Modules:

- Artificial Intelligence
- Software Engineering
- Software Project Management
- Computer Science Project
- Advanced Topics in Computer Science

Brunel University Level 2

(2022-2023)

Modules:

- Software Development and Management: A+
- Year 2 Group Project: A*
- Usability Engineering: A
- Algorithms and their Applications: A+
- Networks and Operating Systems: B+

Albemarle Independent College

(2019 – 2020)

A-Levels:

- Arabic: A
- Maths: B
- Computer Science: B
- Economics: B

Brunel University Level 1

(2021-2022)

Modules and Grades:

- Software Design: A*
- Fundamental Programming Assessment: A+
- Software Implementation Event: A+
- Information Systems and Organisations: A+
- Group Project Reflection: A
- Logic and Computation: A

Douay Martyrs Secondary School

(2013 – 2018)

11 GCSES, grades A-C including Maths, English and Triple Science.

Relevant Work Experience

Healio (November 2023 – February 2024)

- Developed Healio, a personal AI healthcare chatbot assistant as part of my final year project.
- Used Python to implement a Random Forest Classification model to predict a disease from a set of given symptoms.
- Collected a dataset of symptoms and diseases that I used to train the model with. The dataset consisted of 43 unique diseases and 4921 rows of training data.
- Integrated the NHS API to fetch descriptions, treatments and symptoms of every disease.
- Employed gpt-turbo-3.5 to facilitate responses to non health related queries, enhancing user engagement.

HecoCost (August 2023 – January 2024)

- Served as a Scrum Master in the development of HecoCost.

- Created a Trello board which contains all the user stories for the project. They were organised into 4 sections: To do, In progress, Done, Checked. The last section only contains the user stories which were approved by the Product Owner.
- Organised weekly sprint meetings with the development team to go over completed user stories and progress on incomplete user stories.
- Acquired valuable skills in management, planning, and Agile methodologies, contributing to the project's successful execution.

EduNotes (December 2022 – March 2023)

- Second year's group project required us to produce a full stack website revolving around solving one of the 17 UN Sustainable Development goals.
- Discovered different ideas for solving the Quality Education UN Sustainable Development goal with my group, and decided to choose Education.
- Studied Springboot in order to use it as the backend for this project, alongside HTML, CSS and JavaScript with the ReactJS framework.
- Worked as a group to develop a notes taking and sharing website with a personal and discovery feed for different users.
- Gained knowledge in Springboot, React and teamwork skills.

BrunelTalentMarketplace.com (BTM) (July-September 2022)

- I was asked to work with a team to develop the frontend of the website.
- Brainstormed different ideas for the design of the website by researching the competition and evaluating their strengths and weaknesses.
- Used HTML, CSS and JavaScript languages as well as ReactJS framework to code the frontend.
- Developed my communication skills through working in a small team and understanding the customer's requirements.
- Improved my time-management by meeting deadlines set by the customer to produce a working prototype of the website each sprint.

JanaHealthCare (JHC) (December 2022-January 2023)

- Jana Healthcare approached me to develop the frontend for their website.
- Browsed through multiple clinical websites to look for design inspiration.
- Used HTML, CSS and JavaScript as well as React framework to develop the website.
- Enhanced my JavaScript skills as this project required multiple image comparison sliders which were developed using JavaScript.
- Developed my individual learning skills, as this project was produced solely in a short period of time.

Project Work

Marwanhaj (September 2022)

- Developed a personal portfolio website to showcase my projects, skills and CV.
- Researched multiple portfolio websites to finalise a design for my project.
- Produced the final website using HTML, CSS, and JavaScript while using the ReactJS framework.
- Gained more knowledge about CSS by making the website mobile-friendly, responsive for any size of screen.
- As I was working on this project independently, I improved my creativity and independent work by researching designs and ideas for the layout of the website.

Year 1 Airport Simulation Project (December 2021- April 2022)

- Our group project involved planning, designing, implementing and testing a fully functional airport booking system.
- My team and I each came up with a design for the program, which we later on agreed on one to use whilst implementing.
- Used Java to complete the project.
- As I was the team facilitator, I gave each member a component to complete during a set time period. Through this, I learnt how to allocate tasks correctly as well as how to lead a team.
- Organised regular meetings with each other to discuss the difficulties and how to overcome them as a team. This enhanced my communication skills as well as my teamwork.

Other Work Experience

Associate Teaching Assistant (ATA) (September 2022 – December 2023)

- Developed communication skills with students.
- Improved my teaching skills by answering difficult questions given by students.

- Organised my time between self-learning, teaching and attending lectures and labs.
- Gained patience when working with students as they are inexperienced in their first year.

NCS (July 2018)

- Volunteered in an elderly care home as part of our campaign.
- Refined my speaking skills while surveying the public about issues in their area.

Hobbies

Outside of work and study, I am a very active person who enjoys playing football, going to the gym, playing the piano and improving my chess skills daily. I have achieved many trophies and medals with my previous football team, helping them score goals, assist my teammates and improve the team as a whole.

References

Available upon request.