

SEBASTIAN RICHARDS

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OBJECTIVE

A recent Computer Science MSc graduate with a solid fundamental understanding of programming languages and the software design and implementation process. I am looking to establish myself in a long-term career where I can continue to improve upon my knowledge and grow as a software developer.

PROJECTS – All projects can be viewed on my portfolio website linked above

Project 1 – Digital Twin for Microreactor Simulation Environment

This application utilises the MERN stack to interface with OPC UA, allowing a user to specify a virtual chemical microreactor which initialises an OPC UA server containing the specified information. With the expressJS backend, users can make backend API calls to trigger OPC UA client calls that communicate with the newly initiated OPC UA server, fulfilling the criteria of a digital twin simulation.

Languages used: ReactJs, ExpressJS, nodeJS, mongoDB, nodeOPCUA client/server

Project 2 – Opticron Full Stack Web Application and Content Management System

This project is a full stack web application which is mobile and tablet responsive using Foundation Framework with all content being held in an SQLite database. The application also includes an admin content management system where the user can perform CRUD operations to the database via the frontend to change text and image content on the page.

Languages used: ASP.NET Core, SQLite, C#, Razor, HTML, CSS

Project 3 – Flask Social Network Microblogging Service

This project allows users to create an account, login and create a post as well as comment and like these posts. The user can update their profile information by changing their profile picture and password. The users' passwords are encrypted using Bcrypt.

Languages used: Python, SQLite, Flask, HTML, CSS, Bootstrap deployed using Heroku

LANGUAGES

Python, SQLite, HTML, CSS, JavaScript, React, ASP.NET Core, C#, Java, Flask, Django, Bootstrap, Heroku, Git, VS Code, Pygame, Tkinter, Unity

EDUCATION

MSc Computing – Cardiff University (09/2020-12/2022) 1st Class Achieved on thesis

BSc Chemistry with Medicinal Chemistry – University of Warwick (2014-2017)

GCE Levels | Maths(A), Chemistry(A), Physics(B) – Royal Latin School (2012-2014)

PREVIOUS WORK EXPERIENCE

- Noden Farms Daventry – Farm Worker (05/19 – 10/19)
- 20/30 Labs Northampton - Laboratory Technician (09/18 – 02/19)
- Find New Business Buckingham – Sales Executive (05/18 – 09/18)
- Abbey CE Academy – Teaching Assistant (01/18 – 05/18)