DEMPSEY PALACIO-TASCON

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EDUCATION/QUALIFICATIONS

University of Warwick

Sept 2019 - Jul 2023

MEng Discrete Maths (Maths and Computer Science) – Upper Second Class Honours

Kings College London Maths School

Sept 2017 - Jun 2019

• A-Level grades: Further Maths A*, Maths A*, Physics A, Computer Science A (AS)

Bacons College London

Sept 2012 - Jun 2017

GCSEs: 8 A* - B including 9 in Maths and A* in Physics and A in Chemistry, Business and Computer Science

PROJECTS

Interactive Sudoku Web Application - Demo GitHub

Dec 2024 - Jan 2025

- Built a web-based Sudoku game with real-time chat using Go and Echo.
- Implemented WebSockets for real-time game updates and chat interactions between users.
- Integrated RapidAPI's Sudoku API to dynamically fetch puzzles with configurable difficulty levels.
- Leveraged HTMX for efficient client-side updates and templ for modular server-side rendering.
- Streamlined development with Golang Air for hot reloading and containerized the application using Docker.

Portfolio and Blog Application - Demo GitHub

May 2024 - Nov 2024

- Developed a server side rendered portfolio and blog application using Go, Echo, HTMX, and Templ.
- Enhanced performance and SEO optimization through server-side rendering, caching and designed a visually appealing, responsive user interface using SCSS.
- Created RESTful APIs with Echo to ensure efficient data exchange to frontend and customisable sites with filters.
- Integrated Markdown to HTML Compiler Goldmark for ease of blog post redevelopment with greater flexibility in design.

Inventory Management System for Small Businesses

Sept 2023 - Jun 2024

- Built an inventory tracking app enabling businesses to manage stock levels, track sales, and reorder items.
- React and Tailwind CSS for frontend; Spring Boot with a REST API; PostgreSQL for relational data storage.
- Created an intuitive UI to view, edit, and search inventory items.
- Integrated automated push alerts for low-stock items and daily reporting on sales metric.
- Collaborated with a business owners to plan, design, and test the project, demonstrating effective communication and client relational skills.

WORK EXPERIENCE/VOLUNTARY WORK

freeCodeCamp London - Software Engineer & Advisor

Sept 2023 - Current

- Assisted in planning, organizing, and executing software development workshops, enhancing participants' technical skills and confidence, resulting in a 20% uptick in attendance and participation.
- Provided support and guidance to club members, addressing their questions, and facilitating their learning journey.
- Organized and led technical workshops on various programming languages and software development methodologies, including Data Structures and Algorithms (DSA), System Design, and Agile development practices.
- Led website development, enhancing UI and accessibility to create an inclusive user experience.

Technical Skills

Programming Languages

- JavaScript/TypeScript Strong experience with frontend frameworks like React, building modular components.
- Java Experienced in backend development using Spring Boot, including security and data handling.
- Go Gained proficiency in high-performance API development, focusing on concurrency
- Python Used extensively for data processing and machine learning in backend data pipelines.

Databases

- PostgreSQL Learnt officially during degree and sharpened skills by utilising it in various projects that required different schema/database designs (skills also transferable to other SQL based databases).
- MongoDB self-taught for future projects where relational databases are not suited.

Other Technologies:

- Git/GitHub Active participant in collaborative development, contributing to open-source projects by properly utilising branches, forks and pull requests. Experience setting up GitHub Actions for linting, testing and deployment.
- Docker Containerised several projects to improve performance on other machines.