**Daniel Madeley**

Email: [daniel.c.madeley@gmail.com](mailto:daniel.c.madeley@gmail.com)

LinkedIn: <https://dub.sh/linkedin-madeley>

Website: <https://www.mxdeley.com/>

Github: <https://dub.sh/github-madeley>

Mobile: +44 7919587870

**Summary**

As a Full-Stack Developer, I specialise in designing and developing web applications tailored for small businesses. My expertise encompasses both frontend and backend development, ensuring seamless integration and functionality across all platforms. I am proficient in building robust CRUD applications that efficiently interact with RESTful APIs.

In addition to my development skills, I have a strong background in email marketing campaigns, leveraging my technical abilities to enhance customer engagement and drive business growth.

Furthermore, I bring a unique blend of skills from my experience as a Structural Engineer. I utilise Python to automate structural design calculations, adhering to Eurocode standards. My proficiency with libraries such as Pandas, Numpy and Matplotlib allows me to perform detailed design analyses and present the results through clear, graphical representations.

This diverse skill set enables me to deliver innovative solutions that meet both technical and business objectives.

**Professional Experience**

**Structural Engineer**

*OCSC, London 2024-ongoing*

Designed RC frames to Eurocode revision 2, keeping up to date with the latest design codes. Extracted design data from SCIA (FEA) and performed structural calculations using Numpy and Scipy, formatting the calculations using forallpeople so that it can be exported to LaTeX and presented to the client. Create design markups and sketches using Bluebeam. Mentored two interns when designing a single-storey RC basement. Used Rhino3D and grasshopper to scheme design a steel frame using parametric modelling techniques.

**Assistant Structural Engineer**

*Austin Partnership, Cardiff 2022-2024*

Designed structures to Eurocode standards. Used Pandas to organise data from FEA software. Used Numpy and Scipy to calculate structural calculations. Used python and excel to automate design calculations. Built models using Tekla Structural Designer and Robot.

**Freelancing**

**madeleydesignstudio** *2021-2024*

* Structopia

*Domain: structopia.tech*

Designing and developing "Structopia," a SaaS application that empowers structural engineers to organise workflows and automate calculations. Utilising React and Next.js to create a dynamic, responsive frontend enhanced by server-side rendering and static site generation. Implementing a modular architecture with Turborepo, integrating a TypeScript frontend with a Python FastAPI backend. Leveraging Python libraries like Pandas, Numpy, and Langchain for advanced computations and AI integration. This dual-language approach harnesses the strengths of both TypeScript and Python, maximizing efficiency across the application stack.

* Wedding App

Designed and developed a secure, barcode-accessed image-uploading app using Cloudinary for a wedding event, enabling guests to share and access photos in real-time through a private database.

* The Digital Dino

Domain: thedigitaldino.com

Designed and developed the landing page for the design agency "The Digital Dino," utilising Next.js, Framer Motion, and GSAP to create a dynamic and engaging user interface. Integrated Payload CMS to empower the marketing team with the ability to edit and manage site content independently.

* HJB Coaching

Domain: hjbcoaching.online

Designed and developed a web application for booking personal trainer sessions, which also serves as a knowledge base for clients to learn about fitness programs and nutrition. Utilised Next.js, Tailwind CSS, shadcn, and Payload CMS to architect and build the project.

**Education**

Civil Engineering 2:1 *2019-2022*

*Leeds Beckett University*

Key Modules:

Structural Analysis, Computational Design, Material Science, Statics, Continuum Mechanics

Additional Study:

Boot.dev, Fullstack Hero, Codewithantonio, EngineeringSkills, The Last Algorithm course you will need.

*References are available on request.*