JACK MARCHANT

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EXPERIENCE

Undergraduate Teaching Assistant, University of Sheffield   Jan 2024 — May 2024

- Individually lead a cohort of over 40 undergraduate students through the practical side of Introduction to Data Structures and Algorithms module.
- Held weekly sessions where I was responsible for introducing new concepts, demonstrating problem solving techniques, and addressing student enquiries.
- Collaborated closely with the senior lecturer who lead the module, attending weekly meetings that ensured alignment between session content and module objectives.

Intern, Synergy Corporate Technologies   Jun 2023 — Sept 2023

- Part of the company's Plan/Build Team specialising in communicating with external clients and fulfilling all needs as their all round technology solutions partner.
- Improved productivity of the machine imaging team by introducing a new system that increased the average output of the team by 60%.
- Experienced working with the development team and learning from senior full stack developers.

EDUCATION

University of Sheffield, Computer Science, BSc   2021 — 2024

- Gained experience in subjects including: Advanced Data Structures and Algorithms; Automata, Computation and Complexity; Logic in CS; Functional Programming; Data Driven Computing.
- Part of a selective Undergraduate Ambassador Scheme where I developed an intervention to improve the way local schools deliver CS, and taught in classrooms for six months.

PROJECTS

Empowering the Homeless in a Cashless Society

- Developed a final-year university dissertation project centered on an innovative payment system that allows swift and secure monetary transfers via platforms like Apple/Google Pay for donations/sponsorships.
- Engaged with local charities to narrow the scope of the project and fortify the security for both donors and recipients.
- Utilised technologies such as React, Node.js, MongoDB, and Stripe.

Medical Placement Platform

- Developed a 'Trip Advisor style' placement platform for a client from a local medical school.
- Implemented features to collate placement opportunities, user comments, and contact details.
- Navigated challenges in an AGILE team setting from a leadership role.
- Maintained strong client communication from requirement gathering to project delivery.

Pub Golf Interactive Game

- Created a web app using .NET core, SQL, and Microsoft Azure Services that lets users design pub/bar courses, invite friends, and input scores in real-time.
- Spearheaded a university-wide tournament, achieving substantial sign-ups and brand visibility.
- Actively solicited and integrated user feedback to enhance and rejuvenate the platform.

Enigma Machine Simulator

- Used funtional programming language Haskell to recreate a wartime German Enigma Machine, allowing both steckered and simple encoding and decoding of any message with any chosen setup.
- Composed a detailed LaTex report documenting the design and testing for each section, achieving a 92% grade and recognized as publishable quality.

SKILLS

- **Languages:** Javascript, Python, Swift, C#, Ruby, Haskell
- **Frameworks/Tools:** React with hooks, Node.js/Express, Ruby on Rails, SQL, NoSQL (MongoDB)