Harry Findlay

Exeter / Marlborough | harryfindlay@outlook.com | +44 7554 662597
linkedin.com/in/harry-findlay-789090b3/ | github.com/HarryFindlay03 | https://harryfindlay.vercel.app

EDUCATION

University of Exeter, UK **2021 – 2024**
BSc Computer Science – Stage 3

Achieving a 1:1 (79%) with modules focusing on:

- Object Oriented / Procedural / Functional Programming
- Computer and Internet Systems
- Computational / Discrete Mathematics
- Linear Algebra
- Data Structures and Algorithms
- Artificial Intelligence and Machine Learning
- Computer and Network Security
- Computation and Complexity Theory

St John's Marlborough Sixth Form College **2019 - 2021**
A-Levels: *Computer Science (A*), Maths (A), Physics (A)*

St John's Marlborough **2014 - 2019**
10 GCSEs *with majority 8s, 7s and 6s*

RELEVANT PROJECT EXPERIENCE

Applying Deep Reinforcement Learning to Compiler Optimisation **Sep 2023 - Present**
C, C++, Python, GCC, Machine Learning

- Exploring a novel area of research where I am applying modern machine learning methods to compiler optimisation with the aim to increase performance of compilers and the programs that they produce.
- Work on the project will include but is not limited to building an environment for an RL agent; designing and implementing a neural network; and writing a research paper with the goal of getting it published.
- Organising and attending weekly meetings with my supervisor to discuss any problems and ensure that my project is developed to the highest possible quality.

Bespoke E-Commerce Website, ExeChange **Feb 2023 – Mar 2023**
Python, Django, Django REST API, React, PostgreSQL, Git, Docker

- Developed an e-commerce clothes trading marketplace exclusive to Exeter students in a team of six which achieved top marks.
- Individually implemented GitHub actions; user authorisation and authentication; email sending and verification; and integration testing.
- Guided group discussions to ensure ideas were rigorously developed within a demanding six-week timeframe.

Artificial Intelligence Maze Solver **Mar 2023**
Python

- Developed a maze solving program to find paths through extremely large mazes.
- Achieved top marks (92%) by writing high quality and efficient code to implement A* and DFS algorithms.
- Explained and visualised my thinking in a concise report that covered all aspects of my program and provided reasoning for the algorithms I chose to develop.

C / C++ Programming Challenges – *C*, *Memory Management*, *Data Structures, Algorithms* **Mar 2023**

Haskell / Prolog Programming Challenges – *Functional and Logic Programming* **Dec 2022**

Multi-Threaded Card Game – *Java, JUnit, Threading, Test-Driven Development* **Nov 2022**

Cycling Race Management System – *Java, JUnit, Object-Oriented Backend* **Nov 2022**

Tetris Online Game – *HTML, CSS, PHP, JavaScript, MySQL, Azure VMs* **Mar 2022**

EXPERIENCE

EXCODE, UNIVERSITY OF EXETER **Oct 2023 – Present**
Workshop Leader
Teaching programming to up to 30 students at a time and allowing them to further develop their skills by providing information and guidance on extra resources, all as part of an initiative to enable students to learn the fundamentals of programming whilst at University.

UNIVERSITY OF EXETER CYCLING CLUB **Sep 2022 – Sep 2023**

Welfare Officer

Attending training on areas regarding safeguarding and welfare and being able to quickly and confidently answer any questions or concerns of members to ensure a safe and inclusive environment for all.

SAMUEL JONES, EXETER **Nov 2022 – Feb 2023**

Front of House

THE ROEBUCK, MARLBOROUGH **Jul 2022 – Sep 2022**

Front of House

MARLBOROUGH LEISURE CENTRE **Feb 2019 – Sep 2021**

Lifeguard

Worked as part of a small, tight knit team to uphold the strict safety standards required while supervising swimming pools and dealing with the day to day running of a community leisure centre.

MARLBOROUGH PENGUINS **Feb 2016 – Sep 2021**

Volunteer Swimming Teacher

Volunteered to help my local swimming club develop their younger swimmers fundamental water skills and swimming strokes to give back to the club that developed me as a swimmer and a young adult.

SKILLS AND INTERESTS

Cycling Technology Reading and Research Environment Music Languages