Lewis Murphy

Computer Science Undergraduate

PROFILE

I enjoy problem solving tasks, working in a team, and taking part in creative projects. I have experience working with multiple languages, including python, Java, C, Javascript, and PHP. I have experience coding collaboratively on large codebases using IDEs and git. I have experience with AI and computer vision.

PROJECTS

Studeats Webapp — *HTML, Javascript, PHP*
- Worked in a team of 7 to produce a fullstack webapp using HTML, JavaScript, PHP, and SQL.
- Employed best practices to avoid security vulnerabilities, such as by SQL injection.
- Produced a working product that was tested by peers.

Stendhal — *Java, Software Engineering*
- Worked in a group of 8, following industry standard software engineering practices.
- Utilised test first development in order to identify and fix issues in a codebase of 1000s of lines of code.

Matrix Operations — *C*
- Implemented 13 functions, in C, relating to performing operations on matrices.
- Utilised best practices for finding and preventing memory leaks.

2048 AI Agents — *Python*
- Produced a unique version of the game "2048" from scratch, using Python and the Tkinter library.
- Created a Q-Learning and Expectimax agent to play the game and compare results.

Codepen Creative Coding — *JavaScript, p5.js*
- Created a number of creative coding projects using the p5.js JavaScript library.
- Projects include a Sierpinski Gasket creator, which produces a Sierpinski gasket using user input as an initial starting point.
- Projects attempt to recreate interesting projects, or create a completely new product through the use of various mathematical functions.

CONTACTS

Email: lewismurphy0402@gmail.com

Github: https://github.com/Defalt0402

Codepen: https://codepen.io/defalt0402

EDUCATION

University Of Manchester
2022–2025

- First (71%)

Ryburn Valley High School
2015–2022

- Mathematics (A*)
- Physics (A*)
- Computer Science (A*)

EXPERIENCE

Happy Valley Pride
2020–PRESENT

- Spoke on stage at events on several occasions
- Worked directly with charities and businesses to plan events

Greenwood's Garage

- Installed networking hardware that greatly improved productivity
- Performed software and hardware tests on the installed material

SKILLS

Programming — Python, Java, JavaScript, PHP, HTML, CSS, C, SQL, Assembly
Technical — Git, Linux, VSCode, Eclipse, LaTeX
Courses — Algorithms and Data Structures, Artificial Intelligence, Databases, Programming Paradigms, Software Engineering
Soft — Facilitating Team work, Delegating tasks,