

# JACK PIPER

BSc. Computer Science Student

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## PROFILE

An experienced and enthusiastic 2nd year BSc. Computer Science student, with a passion for problem-solving, teamwork and making a positive difference through finding the best solutions. Seeking an IT or software placement to apply and demonstrate my existing skills, as well as learn and develop through contributing to real-world projects.



## EDUCATION

**BSc. Computer Science** 2024 - 2028  
School of Science | Loughborough University

**GCE A-Levels @ Peter Symonds College** 2022 - 2024  
Mathematics (A), Business (A), Computer Science (A\*), EPQ (B)

**10 GCSEs @ Wildern School** 2017 - 2022  
Five grade 9, five grade 8, incl. Maths (8), Eng. Lang (8)

## LANGUAGES

- English (Native)
- French

## REFERENCES

Available on request.



## PROJECTS

**Gameserver & freelance for hire** 2022 - 2024  
Lead Developer

- Served as lead developer for a gameserver as a hobby project;
- Developed new and existing skills, including SQL, JS and C#;
- Responsible for leading a team of devs. to develop implementations, optimise/refactor and maintain the code to resolve issues;
- Also maintained a JS API, and ASP.NET Core MVC API;
- Completed small paid projects through freelancing, incl. refactoring;

**Client-side anti-cheat system for games** 2023 - 2024

- Developed an advanced anti-cheat system that monitored key gameplay aspects, with some AI detection (image interrogation), and manual detection, as well as incorporating an intuitive user interface;
- Implemented anti-tampering measures, e.g. anti-VM and anti-debugger, as well as using .NET's Native AOT compilation;
- Developed an API in Express JS to handle the requests;

**Omegle social media platform remake (AL Project)** 2023 - 2024

- Identified key security and privacy flaws in Omegle, and designed documented ways to rectify these to ensure modern user safety;
- Implemented these fixes along with a user match graph traversal which made best matches, live chat and responsive UI - written in C#;

**Hospitality EPOS w/ client booking + analytics** 2022 - 2023

- Used .NET MAUI framework written in C# to design the mobile application for hospitality clients to use;
- Designed and developed a modern and intuitive dashboard for owners to track reservations and monitor analytics using React JS and Tailwind CSS, with Express JS on the backend;



## KEY MODULES

- Embedded Systems Programming (94%) - Creating a payroll management system with memory constraints;
- Software Engineering (88%) - Learning the fundamentals of project feasibility, teamwork and environments;
- Programming & Databases (78%) - Creating a Python rental system, and understanding complex databases;



## TECHNICAL

**Languages:** Python, Java, C++, C, C#, Lua, JavaScript, SQL

**Web Dev:** React.js, Node.js, Express.js frameworks, MERN, LAMP stacks

**Databases:** MySQL, SQLite, PostgreSQL

**Version Control:** Git, GitHub

**Tools:** Docker

**Other backend:** Springboot



## SKILLS

### Problem Solving and Critical Thinking

On numerous projects, an example being the client-side anti-cheat, there have been a lot of problems to overcome such as obfuscation/protection, as well as adapting to evolving changes and also understanding how different frameworks work, and their trade-offs.

### Teamwork and Communication

At my sixth-form college, I spent time as a Sports Ambassador which involved collaborating with numerous people on events. Through this, I also refereed the recreational "5-a-side" league, which required a great deal of leadership skill to ensure the rules of the game were followed while keeping it fun for everyone.

### Project Management and Adaptability

During my freelance work, I took a leading role in coordinating a number of development teams, including those responsible for the web servers and gameservers to ensure consistency, motivation and a shared vision. I had to be quick to adapt to the new environments with different people and styles of programming, as well as different expectations of quality and time to completion.

### Leadership and Interpersonal

During team projects coursework at university and also amongst hobby projects, I have applied and developed leadership skills to ensure everyone felt included and that the project progressed on time, and to a high standard.



## ACHIEVEMENTS

### Headteacher's Award for Computer Science

2021

Awarded for exceedingly high degrees of diligence, dedication and commitment to the subject amongst a large cohort of students.

### TechFest Award for Game Design (Won) / Website Design (Finalist)

2020-2021

Nominated and won an award for a treasure hunt / minesweeper style game made in Python: an optimised, intuitive and creative solution. Runner-up in TechFest in website design for a zoo project.

### Uni. of Cambridge HE+ Programme & Uni. of Oxford Inspire Programme

2023

Participated in the Mathematics-focused programme, completing a project on uncertainty. Developed knowledge of concepts such as group theory and abstract mathematics.



## WORK EXPERIENCE

### Business & Tech. Internship @ Coaching with Christianne

2025

Developing a chatbot for a local therapy/coaching business based at the university working closely with the owner to progress the project.

### School of Science Ambassador @ Loughborough Uni

2025

Representing the department at university events through prospective student engagement and event coordination.

### CompSci Collab Officer @ Loughborough Uni

2025

Working with department members to organise events and opportunities within the department; liaising with the committee and the wider bodies.

### Sports Ambassador @ Peter Symonds College

2022-2024

Took an active role in sports management at the college through events like open days and also co-lead a 5-a-side football league.