

Callan James Short

Dundee, Scotland | 07479 581181 | callanshort8@hotmail.com | GitHub: github.com/callanshort8 |

Personal Profile

I am a motivated and highly collaborative Computer Science student at the University of Dundee (graduating June 2028), with a strong interest in embedded systems and software development. I am skilled in both front-end and back-end programming, focusing on building efficient and simple solutions to problems facing me. Through a range of group and individual projects, I have developed strong communication, adaptability, and teamworking skills. I am now eager to apply my technical expertise and creative problem-solving to contribute as a Graduate Software Engineer.

Education

BSc (Hons) Computer Science – University of Dundee

Graduation: June 2028

Key Modules: Object-Oriented Programming · Software Engineering · Algorithms & Data Structures · Embedded Systems · Networking · Operating Systems

Technical Skills

Programming Languages: Java, Python, MicroPython.

Web Development: HTML, CSS, JavaScript

Databases: SQL

Tools & Platforms: Git, GitHub, VS Code, Raspberry Pi Pico, Thonny IDE

Interests: Embedded systems, automation, Algorithms

Projects

BackChat – Console-Based Social Network (Java)

We developed a Java-based console application simulating a social network with users, messages, and friendships. I designed object-oriented classes for user data, messages, and connections. I also implemented data persistence using Java's Serializable interface. Strengthened skills in OOP principles, logical structuring, and error handling.

Haunted Mansion Escape Room Controller (Embedded Systems)

This was a Collaborative embedded project controlling a hidden lock mechanism for a themed escape room challenge. I programmed a Raspberry Pi Pico microcontroller using MicroPython to create this mechanism. Focused on state management, debounce logic, and reliable circuit control. Enhanced teamwork and problem-solving through hardware-software integration.

Dundee Law Car Wash (Responsive Website)

Individually designed and built a responsive, promotional website for a fictional local business. Used HTML, CSS, and Bootstrap to create a mobile-friendly layout. Applied modern and accessible design principles using Google Fonts. Demonstrated independence and front-end development skills.

Experience

Student IT Support Assistant – University of Dundee (2024–Present)

Assisted fellow students with troubleshooting development tools, debugging, and version control setup. Supported installation and configuration of VScode and GitHub. This allowed me to improve my own communication skills as I helped others.

Transferable Skills

- **Teamwork, Communication, and Time Management:** Collaborated effectively with peers in varied group projects to share tasks, meet deadlines, and deliver functioning programs.
- **Problem Solving:** Tackled coding bugs and hardware issues methodically to develop efficient, maintainable solutions.
- **Adaptability:** Adjusted quickly to new tools, coding languages, and project environments across multiple disciplines. Making each problem i face next easier than the last

References

Available upon request.