

Harry Newman

Mobile: 07395 228259 | h.newman2005@outlook.com | linkedin.com/in/harrynewman/ | github.com/veronin1 | veronin.dev

PROFILE

Computer science student with strong skills in C++, Python, and web development. Passionate about performance optimisation and building practical projects that solve real problems.

EDUCATION

Aston University <i>Bachelor of Science (BSc Hons) in Computer Science</i>	Birmingham, UK <i>Sep. 2025 – Present</i>
Walsall College <i>Level 4 Higher National Certificate (HNC) in Computing – Merit</i>	Walsall, UK <i>Sep. 2024 – Jun. 2025</i>
Walsall College <i>Level 3 National Extended Diploma in Computing – D*D*D</i>	Walsall, UK <i>Sep. 2022 – Jun. 2024</i>

PROJECTS

soniq <i>C++, raylib, CMake, Git</i>	Jul. 2025
<ul style="list-style-type: none">Developed a real-time audio visualiser from scratch, capable of parsing WAV files and processing audio data using a custom-implemented Fast Fourier Transform (FFT).Critically optimised the Cooley-Tukey FFT algorithm, achieving a 30% reduction in CPU usage and a 50% decrease in RAM allocation compared to the initial implementation.Visualised frequency magnitude data in real-time using the raylib graphics library and ensured memory safety using Valgrind.	
Flask BMI Tracker <i>Python, Flask, HTML/CSS, JSON</i>	Jun. 2025
<ul style="list-style-type: none">Engineered a dynamic web application that allows users to calculate and track their Body Mass Index (BMI) over time, built as the final project for Harvard's CS50x.Designed and implemented a user-friendly interface with Flask, handling user input, performing calculations, and rendering results dynamically.Implemented data persistence by storing and retrieving user BMI history from a JSON file, providing a continuous user experience across sessions.	

CERTIFICATIONS

CS50x: Introduction to Computer Science <i>Harvard University (via edX)</i>	Jun. 2025 <i>Online</i>
CS50P: Introduction to Programming with Python <i>Harvard University (via edX)</i>	May. 2025 <i>Online</i>

TECHNICAL SKILLS

Languages: C/C++, Python, SQL, JavaScript, HTML/CSS
Frameworks: Flask
Developer Tools: Git, GitHub, SQLite, Valgrind, CMake
Libraries: raylib