Jadon Mensah

+44 7488548948 | jm2675@cam.ac.uk | github.com/miscv32 | jadonm.com

Education

University of Cambridge Oct 2024 — BA 2027 / MEng 2028 (optional)
Engineering *First-year result: 2:1*

- Courses including computing, mathematics, and digital electronics.
- Labs: 3D CAD modelling with **SolidWorks**, independent electronics project (accelerometer-controlled synthesizer).

Work Experience

Placement Student July 2023 — Aug 2023
Science and Technology Facilities Council *Rutherford Appleton Laboratory*

- Implemented signal processing techniques using **Python** to remove noise from X-ray detector output.
- Compared multiple noise removal and signal reconstruction techniques, culminating in a presentation of my findings.

Projects

Game Boy Emulator (github.com/miscv32/scgb) May 2025 — Present

- Completed CPU (Sharp SM83) emulator in **Rust**, achieving instruction-level accuracy.
- Validated functionality through comprehensive test suite.
- Currently working on full Game Boy system including picture processing unit, and memory bank controllers

CHIP-8 Interpreter (github.com/miscv32/supercool.ch8) April 2025

- Wrote an interpreter in **C** for the CHIP-8 programming language.
- Verified behaviour against a comprehensive set of test ROMs.

Cribs++ (github.com/AKCircuit/AIHackathon) March 2025

- Developed the front-end for my team's hackathon project using **JavaScript** and **React**.
- Cribs++ was a platform for students to view hints for homework questions.
- Supervisors could view which hints were used, and use this to plan time with students more effectively.

AQA Assembly Interpreter (github.com/miscv32/AQA-Assembly-Interpreter) Nov 2024 — Dec 2024

- Wrote an interpreter in **C++** for the ARM-like assembly language used in A-level computer science exams.

Statpack (statpack.jadonm.com) Sept 2023 — Jan 2024

- Created a statistical calculator and spreadsheet web application for school students.
- Wrote all the **HTML** and **CSS** for the user interface.
- Implemented statistical functions in **JavaScript**.

Extracurricular Activities

C2C Capture The Flag Competition Feb 2025

- Online challenge-based cyber security competition for university students.
- Placed in the **top 16%** of competitors, qualified for in-person finals.

Cambridge University Robotics Society Oct 2024 — April 2025

- Member of "Wise Angel" autonomous drone team.
- Modelled antenna propagation for drone's ground station using **MATLAB** Antenna Toolbox.

Skills

- **Programming**: Python, C++, C, JavaScript, Rust, MATLAB, GLSL
- **Software and Frameworks:** Git, React
- **Hardware:** Electronics prototyping, CAD (SolidWorks)

Interests

- Shader art (https://jadonm.com/gallery.html)
- Retro computing and emulation