Noa Burt Curriculum Vitae



Education

2022-present BEng Computer & Electronic Systems, University of Strathclyde, Glasgow, Scotland

2016–2022 High School, Johnstone High School, Johnstone, Scotland Results (5th and 6th Year):

- AH Computing Science (B);
- AH Mathematics (D);
- O H Physics (A);
- H English (A);
- O SCQF Level 5 Cyber Security (P);

Experience

Extra-Curricular

2025 FPGA Development Summer Internship, Thales, Govan, Scotland TODO

2023-present Formula Student FS-AI, University of Strathclyde Motorsport

Active member of the University of Strathclyde's Formula Student team USM, specifically the Formula Student AI (FS-AI) team.

In 2023/24, my first year in the team, I played a roll in leading the team to compete the the Formula Student UK Driverless competition for the first time in the team's history. This allowed me to improve many skills valuable to working in industry that my course otherwise would not.

Development of our software involved many tools and languages I had previously been unexperienced with, such as:

- O ROS2 (Robot Operating System 2) Framework
- CAN Interfacing in C++
- Docker Containers
- Interconnected Software Systems
- O Foxglove & Dynamic Bicycle Physics Simulation

Then, moving into the 2024/25 academic year, I led the development of a new automated testing system for our software, which utilised many new tools avaliable to the team that year, such as GitLab's CI and Cloud Hosting systems. This furthered my Docker and GitLab skillset, as well as leading the way for my application for Software Infrastructure System Head in the Driverless team

2022–2025 **Kitchen Porter**, *The Boarding House*, Howwood, Scotland Member of kitchen staff for a popular Gastropub in Howwood.

Employment here has developed my time management skills, as well as often dealing with responsibility for customer food presentation in a fast-paced environment.

2016–2024 **Bagpiper**, *Johnstone Pipe Band*, Johnstone, Scotland Playing member of Johnstone Pipe Band (JPB).

Playing for the Renfrewshire Schools Pipe Band, the novice branch of JPB at the time, before being promoted straight to the top level band (Grade 1) has taught me crucial skills for being a good team member, responsibility for putting in work in my own time, and general dicipline with the instrument as well as personal appearance

Curricular

2023–2024 **FPGA Design Project**, *University of Strathclyde* 2nd Year VHDL Class: Group Assignment

One of my 2nd year university modules was centered around VHDL programming and FPGA implementation. For the final assignment for this class, we were assigned a group design project; to design and implement a solution for a set task, collect our design process and implementation in a professional report, and demonstrate our solution.

This class was my first introduction to such FPGA programming, while also allowing me to develop further my teamwork and report writing skills. The limitations present in describing hardware with VHDL proved very challenging at first, but sparked my intrest in FPGA development, leading to me seeking out such a summer internship for 2025.

2023–2024 **Simple Shell Project**, *University of Strathclyde* 2nd Year Operating Systems Class: Group Assignment

Another group project completed in my 2^{nd} year was developing a simple OS shell in C for a Unix-type system. This was my first experience with both C and Linux development, but the challenges it presented motivated me to work harder to understand the concepts.

Through this I gained valuable knowledge about operating systems, such as processing, thread, and memory management, scheduling, and many such OS concepts.

This class led to my personal (partial) adoption of using Linux, mainly for further C software development, as well as discovering my interest in Embedded / Microcontroller development. This then resulting in my selection of $3^{\rm rd}$ and $4^{\rm th}$ year Microcontroller classes, and again leading me to seek out a summer internship in the field of Embedded systems for 2025.

Programming Languages / Tools

Some examples of skills below are displayed on personal GitHub

| Python | Proficient | USM FS-AI, Personal development |
|--------------|------------|---|
| \mathbf{C} | Proficient | Uni projects, Personal developent |
| Git | Proficient | USM FS-AI, Uni projects, Personal development |
| MatLab | Proficient | USM FS-AI, Uni projects |
| | | |

| Simulink | Competent | $Uni\ projects$ |
|----------|-----------|--------------------|
| Java | Competent | $Uni\ projects$ |
| VHDL | Competent | $Uni\ projects$ |
| Docker | Competent | $USM\ FS	ext{-}AI$ |
| ROS2 | Competent | $USM\ FS	ext{-}AI$ |

LaTeX Basic

C++ Basic

GCC Tools

Basic

USM FS-AI, Personal development

USM FS-AI (CAN Interfacing)

Personal development

Other Skills / Knowledge

- o Electrical Circuit Design
- o CI / CD Pipelines
- Control Systems

- Object Oriented Programming
- o FPGA Development
- Linux Kernel Basics