# **ALAN SELORMEY**

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# PROFESSIONAL SUMMARY -

Dynamic and eager Robotics Engineering Student at Aberystwyth University, looking to secure a placement so I can learn the ins and outs of production code and apply my own skills to them. I specialize in using general and system-level languages like C and Java. I'm familiar with Arduino, and Raspberry Pi's and have some knowledge of STM32 boards. I excel in innovating solutions like the usage of Custom data structures for lower latency on my text-editor project, demonstrating technical prowess and a continuous learning mindset.

Key Skills	
• C & C++	• Go-lang
• Java	Cmake/Make
Microcontroller Programming	Object Oriented Programming

• Linux Systems

• Software testing

Leadership was demonstrated through the management of a team of 10 during the large cleanup at the 2023 FOSDEM

Effective Teamwork developed through the group collaboration of a presentation with 3 other students Clear communication and competency are shown through tutoring other computer science students in C/C++

Problem-solving is developed through solving project creations and Leetcode problem-solving Adaptability and Open-mindedness shown by swapping my website from C# to Go-lang for performance benefits

Projects

Personal Website: irlalan.net

• Personal website and blog showcasing projects I've made and anything else I find interesting. It uses Golang, HTMX, and templ, and runs on an AWS Ubuntu server instance.

Cross-platform C++ build and automation tool: gcreate

• A build tool like Cmake that is configurable through a config.toml file and can create/manage any C/C++ projects and will later be able to serialize into a Makefile. It is made entirely using Go-lang Custom text editor

• A Custom modal text editor that's GUI GPU-accelerated using SDL

Cellular automaton (Conway's Game of life, lenia)

• My attempt at making Conway's Game of Life and expanding it into a lenia cellular automata that uses continuous data instead of discrete which is what Conway's Game of Life uses.

C++ game engine framework: VEngine

• A Custom game framework to make voxels and voxel games. Using OpenGL API and GLM for linear algebra.

— Education —

Bachelor of Engineering: Robotics And Embedded Systems Engineering, Expected in 06/2027

### Aberystwyth University - Aberystwyth, United Kingdom

Relevant Coursework:

- Algorithm and Data Structures, Artificial Intelligence
- Robotics and Embedded Systems
- Algebra and Differential Equations
- Mathematical Physics, Sensors and Electronics

# A-level: 06/2023

#### Dudley Sixth Form - Dudley, West Midlands

• Computer Science, Mathematics, Accounting

# — Experiences —

#### FOSDEM Volunteer, 02/2024 - 02/2024 Belgium

FOSDEM is a Free and Open-source Software Developer's European Meeting and is when engineers from

different fields come together to attend talks on various topics.

My roles included

- $\cdot$  Setup and help manage the stands at FOSDEM
- · Leading a group of 10 people to help clean up and organize the equipment at the end.

# UKIEPC:

Took part in the 2024 UKIEPC against other universities in the UK and came 4th in Wales.