

FELIX BOWYER

{PLATFORM,SYSTEMS} ENGINEER · DEVELOPER

EXPERIENCE

Platform Engineer

Quadrature, oct. 2023 - present

Establishing a new Kubernetes cluster to allow internal developers to easily deploy containerised applications.

Set up deployment through ArgoCD, integrated Vault PKI with Traefik to automatically issue certificates to GitOps deployed web applications.

Systems Engineer Intern

Quadrature, jul. 2023 - sept. 2023

Used Vault as a PKI solution, distributing certificates via Saltstack to physical servers, and using cert-manager to issue certificates to containerised applications.

Created a self-servicable, high availability monitoring and alerting solution around Prometheus Operator (Prometheus, Alertmanager, Grafana, Slack and JIRA integrations)

Software Engineer Intern

Optiver, jul. 2022 - sept. 2022

Worked in the Core Systems team to make optimisations on real-time trading data flow.

Used zstd dictionary compression to improve throughput of transmission of price changes across an internal network.

EDUCATION

BEng Computer Systems Engineering

University of Warwick, oct. 2020 - jul. 2023

Achieved First class (7X.X%) with honours.

Focused on computational methods, functional language design, low-level programming and hardware design.

Dissertation: Gerrymandering and Generation of Electoral Boundaries.

Research and implementation of automated gerrymandering detection and electoral boundary generation in the UK.

Achieved best Computer Systems Engineering project award.

The Commonweal School

sept. 2013 - jul. 2020

A*A*A*(A) in Computer Science, Physics, Mathematics and Further Mathematics.

5 9s, 3 8s, 2 7s at GCSE, A FSMQ Further Mathematics.

PROJECTS

MiniC Compiler

C · C++ · Compilers

Development of a lexer, parser and code generator for a subset of the C language, producing LLVM IR.

MentorMe

React · JS

Software engineering group project to match new employees to mentors at a major bank. Primarily worked on matching algorithm.

Scratch Clone

Haskell · Interpreters

A clone of Scratch, built with Google's Blockly API. Parses and executes instructions represented in XML using functional programming techniques.

Live Video Filters

Verilog · HLS

Livestreaming hardware-accelerated video filters on a Xilinx FPGA board, via a custom Petalinux pipeline.

Warwick Wrapped

Python · Flask

Creation and deployment of website which pulls data from university systems and summarises it in a shareable format.

ROLES

Technical Officer

University of Warwick Computing Soc.

Administration and management of society infrastructure, enabling members to deploy applications, websites and game servers.

Contributed to teaching Rust and Python courses, and gave academic talks about assembly, type-level programming, and QR codes.

Technical Officer

Warwick Minecraft Society

Setting up, administration and ensuring reliability of Minecraft servers, including writing custom server plugins for charity events.

<https://fbcf.xyz>

<mailto:hello@fbcf.xyz>

<https://github.com/efbicief>