FERDINAND HUBBARD

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Nationalities: Belgian, UK Settled Status (right to work) | Native languages: English, French

EDUCATION

University of Bristol | BSc Computer Science

Bristol, UK | 2021 - 2024

Graduated with a 2:1

Highlighted units: types and lambda calculus, machine learning (coursework), computer graphics

Ampleforth College | A-levels

Yorkshire, UK | 2016 - 2021

Further mathematics, mathematics, computer science, physics: A*, A*, A*, A

EXPERIENCE

FN Herstal | Software Engineering Intern (C++)

Herstal, BE | Jun 2023 - Aug 2023

Designed and implemented a system to calculate the coding-standard-coverage value of a static analysis configuration. It does this by checking the static analyser's output to counter-examples (code snippets) to each rule in the coding standard. This system identified which custom checks should be added to the static analysis configuration, as well as which rules of the coding standard need to be verified by a human during code review. All this information is displayed in an automatically generated web page.

University of Bristol | Teaching Assistant

Bristol, UK | Sep 2022 - Jun 2023

Supported first-year students in 'Imperative Programming' and 'Mathematics B' courses, providing in-class mentoring to improve understanding and performance.

SKILLS

Strong Programming Languages: C#, C++, Python

Weak Programming Languages: HTML & CSS, javascript, rust

Tools: Git, Kubernetes, Docker, LaTeX, CI/CD Pipelines

Languages: Fluent in English and French

PROJECTS

Gnucash version control (ASP.NET, C#, docker) - library repo - web-app repo

Feb 2025 - Current

Developed a .net library to parse and find the diff between two Gnucash files. Also implemented an api and a web-app - gnc-diff.ferdinandhubbard.com - to provide a UI for the library. The aim of this project is to provide an interface for version control and collaboration for the popular open-source accounting software Gnucash.

SPQM Odoo Module: Solar Panel Quote Maker (python)

Oct 2024 - Nov 2024

Developed a custom Odoo module for a solar panel installation business to streamline quoting. Integrated year-on-year financial projections to showcase ROI of a solar panel installation, improving client conversion rates by 25%.

Games Project (rust) - git repo

Jan 2024 - May 2024

Worked as part of a team of 7 to develop a game for the Nintendo 3DS in Rust, using a customized Bevy game engine.

RecallAI (Kubernetes, docker, python, typescript)

May 2023 - Sep 2023

Co-developed a webapp that generates flashcards from lectures and videos. It leverages existing ML models to generate a transcript, and then condenses that information into flashcards. The app is hosted in a bare-metal k8s instance, and was developed to be horizontally scalable.

Composite Design Tools (TypeScript, React)

Sep 2022 - May 2023

Collaborated with Imperial College London's material science department to create a web-based tool for visualizing and analyzing compressive strength models.

Pregame Analysis for League of Legends (Python, TensorFlow)

2021

Trained a neural network to predict game outcomes based on millions of pre-game data, achieving 70% accuracy. I also used Bayesian Optimization to tune the neural network's hyper-parameters

EXTRA-CURRICULAR ACTIVITIES

Sports: Was an active member of the UoB tennis society and represented the University of Bristol in clay pigeon shooting competitions. Passionate about running, golf, and climbing.

Technical Activities: Participated in a CTF competition organized by BAE Systems and the Bristol Computer Science Society, solving cybersecurity challenges.