https://www.linkedin.com/in/henryroutson/

Melbourne, Victoria

#### **Education**

The University of Melbourne July 2021 - Nov 2024

Bachelor of Science, Major in Computing and Software Systems

76 average mark

Ballarat Grammar

Academic scholarship

VCE: Software Development, Specialist and Methods Mathematics, Chemistry and Physics

## Experience

2023

Aerospace and Rocket Engineering Society (ARES), The University of Melbourne

https://www.linkedin.com/company/aresunimelb

React and Python developer

2022

Queen's College IT support

#### **Open-source contribution**

Cached File Explorer - in rust

· Fixed poisoned thread issue

Supabase Auth UI

· Allowed additional UI configuration options and added documentation

### Academics

Machine learning (Keras, scikit-learn)

· Created a stacked model including a neural network with

IT Project (JavaScript / TypeScript, React, HTML, CSS)

- $\cdot \quad \text{Increased code quality and redesigned stack visualisation for a Quicksort visualisation} \\$
- Try Here! https://dev-aia.vercel.app/

Models of Computation (Haskell)

 $\cdot$  My Haskell code was chosen as the solution for numerous practice problems within a cohort of 600

Computer Systems (C)

- · Functional memory allocator for operating systems
- · Multi-threaded web server

Algorithms and Data Structures (C)

· Implemented a Quad-tree, Linked list, Dijkstra and A\*

Foundations of Computing (Python)

· Achieved overall 98%, one of the highest marks in the cohort

# Personal projects

# Scheduling app

· Firebase, Supabase, Flutter, SQL, user authentication, Expo, Typescript, cloud functions

Leetcode Competitive Programming https://leetcode.com/HenryRoutson/

## https://github.com/HenryRoutson/CHelp (C)

- · Tracks dynamic allocations in C and assists in debugging
- · Valgrind alternative

### https://github.com/HenryRoutson/autoheader (Rust)

· Generates header files for C

### References

(With request)

https://www.linkedin.com/in/pranavjayanty/

https://www.linkedin.com/in/ben-sampson-profile/