

# Ashwin Gur

COMPUTER SCIENCE · MECHATRONICS · UNIVERSITY OF SYDNEY

✉ agur9842@uni.sydney.edu.au | 🌐 ashwingur.com | 📷 ashwingur | 🌐 ashwingur

## Education

### University of Sydney

Sydney, AU

BENG (HONS) IN MECHATRONICS AND BSC IN COMPUTER SCIENCE

Feb. 2020 - Dec. 2024 (Expected)

- Weighted Average Mark: 82.2%
- Dean's List of Excellence in Academic Performance
- Dalyell Scholar

## Experience

### Junior Records Developer

Sydney, AU

THE UNIVERSITY OF SYDNEY - ARCHIVES AND RECORDS MANAGEMENT DEPARTMENT

Apr. 2022 - Present

- Developing and maintaining several PowerBi Dashboards used by various departments and teams across the uni
- Rewrote critical backend applications with object oriented design patterns to optimise the running time by several hours using multi-threading to sustain the increasing reporting requirements
- Integrated feedback from clients to create insightful reports that are used to increase the productivity of University operations

### Software Engineer

Sydney, AU

USYD ROCKETRY TEAM

Feb. 2022 - Jun. 2022

- Contributed to the development of a rocket modelling and simulation system for the Ironbark team, which is critical to the iterative design of the physical rocket
- Created a custom graphing and visualisation module using matplotlib, used during simulations
- Communicated very frequently with other student engineers to ensure module compatibility and meeting project milestones

### Software Engineer Intern

Sydney, AU

USYD CUAVA

Oct. 2021 - Oct. 2022

- Helped with the development of a CubeSat operating system, CubeOS, by working on new and existing modules such as the propulsion system
- Taught myself about programming in Rust for low-level system architectures

### Android Developer

Sydney, AU

COMPANY: STREAMPLATE

Jul. 2021 - Oct 2021

- Assisted new interns that joined the Front End team to understand the repositories
- Communicated clearly and frequently with the Front End and Back End teams in order to implement new features and fix bugs
- Published updates to the Play Store and reviewed feedback to improve user experience
- Maintained a high standard of work in the higher stress environment of a startup and prioritised urgent tasks for shareholders

## Projects

### Personal Website

[Code](#)

PERSONAL PROJECT

Jan. 2023 - Present

- Self-taught Next.js and Tailwind CSS to develop a fullstack application to display my portfolio and various other personal projects
- Used MongoDB as the database for some pages to create, update and fetch dynamic data

### Turret-Spinner

[Code](#)

PERSONAL PROJECT · INDIE GAME

Jan. 2022

- Utilised component pattern for making the code very modular and reusable
- State pattern used for encoding more complex behaviours for bosses
- Extensive use of OOP principles such as inheritance to reuse code and be able to effectively implement new game object ideas.

### CHIP-8 Emulator

[Code](#)

PERSONAL PROJECT

Dec. 2021

- A CHIP-8 Emulator written in Rust using the sdl2 library for the interface and input controls
- Closely followed the specifications outlined by the CHIP-8 Technical reference
- Consolidated understanding of low level programming and features such as ram, stack, registers and instructions

## Skills

**Languages** Python · Java · C# · C++ · C · Typescript · HTML/CSS · MatLab · Rust · Assembly