

Jiayi Gu

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🇦🇺 Australia



Education

Bachelor of Electrical Engineering (Honours) and Computer Science

Monash University

Feb 2022 – Nov 2026

- WAM: 92.72 / GPA: 4.0
- Achieving Potential Scholarship for Excellence
 - Scholarship awarded to 35 high achieving students each year

High School Diploma

Suzanne Cory High School

Nov 2021

- ATAR: 99.85



Projects

Tunable Signal Amplifier

Analogue Electronics

2024

- Prototyped an amplifier that amplifies signals within 20Hz to 20kHz, with the magnitude of amplification controllable by potentiometer.
- Worked with operational amplifiers and RC circuits.

Motion Compensation Visualizer

Matlab

2023

- Developed custom scripts for common motion compensation algorithms in video compression.
- Visualized the process of different algorithms and compared the efficiencies.

Exchange Partner Rankings

Python | Requests

2021

- Developed a web scraper that computes the ARWU ranking of the exchange partners of Monash University and University of Melbourne.
- Worked with Python libraries and external API, providing a simple web scraper to solve real world problems.



Skills

Python

Requests | Pandas

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C++

ROS2 | SDL2

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JavaScript

Node.js | Express.js

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Java

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Professional Experience

Robotic Arm Engineer

Monash Nova Rover

Jul 2023 – present

- Added keyboard controls schemes to the robotic arm control system in C++ using ROS2 on Linux
- Cooperated with members from diverse disciplines and backgrounds
- Integrated mechanical, electrical and software systems to achieve desired functionality to participate in Australian Rover Competition and University Rover Competition.

Teaching Associate

Monash University

Jul 2023 – Nov 2023

- Assisted in teaching classes for the unit FIT1008: Introduction to Algorithms

VCE Tutor

Point Cook Tutoring

Apr 2022 – Nov 2023

- Taught VCE level Mathematics and Physics classes of up to 6 students
- Prepared study materials for VCE level classes



Languages

Chinese (Mandarin)

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English

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