**Charlie Ridgeon**

charlie@ridgeon.com.au  
+61 0478 797 670

**Summary** Hello,

My name is Charlie Ridgeon. I’m a fourth-semester engineering/computer-science student at the University of Queensland, majoring in Mechatronics and Machine Learning, with a background in hospitality. I’ve had a passion for programming and artificial intelligence for as long as I can remember, and for the last two years I’ve been doing my best to spread that passion with younger generations and build upon my skills.

The project I am most proud of is a Neural Network which I wrote from scratch, using no libraries as a challenge, which I completed towards the end of my senior year at High School.

A portion of my projects can be found on my GitHub page here:

<https://github.com/WizardMorpheus?tab=repositories>

Other projects, of which I am proud, that are not listed there include: an investigation into using neural networks as compression algorithms, various graphics programs (using both OpenGL and SDL) and a program that uses the terminal to display an ASCII art interpretation of a webcam.

I am both professionally and self-taught in a variety of programming languages, C++ being my favourite, and am certain I could pick up any other within days.

I hope my achievements and skills encourage you to reach out to me, and that I will hear back from you soon.

Sincerest Regards,

Charlie Ridgeon

**Career history Robotics Coach** at St Peters Lutheran College

Feb 2024 - Present (5 months)

Assist students ranging from years 7-12, competing in the FIRST Tech Challenge and FIRST Robotics Challenge. Provide insight and expertise in design principals, decision making and software development. Most recently constructing and presenting an introductory course in Java programming for in-built FIRST hardware (can be found on my GitHub Page).

**Data Labeller** at Athena Artificial Intelligence

Aug 2023 - Present (11 months)

**Cafe Allrounder** at Peach and Billy

Jul 2023 - Dec 2023 (6 months)

**Robotics Tutor** at Brisbane Boys' College

Mar 2023 - Aug 2023 (6 months)

Support and assist in students' journey through learning robots from years 3 through 12, including coding and constructing, leading presentations, organizing teams and preparing for various competitions. As well as assisting in the development of the teaching program in order to better involve and support students.

**Robotics Tutor** at Brisbane Grammar Robotics

Feb 2023 - Apr 2023 (2 months)

Organise and support students in competing in the FIRST Tech Challenge, introduce new students to the program and teach them design and engineering principals along with how to use relevant software.

**Instructor** at Junior Engineers

Oct 2022 - Mar 2023 (6 months)

Teach and assist younger children 5-12 years, learning to code in various environments and at multiple difficulties. Ensuring the children are kept safe, managing unruly children, and returning them to their guardians after class.

**Cafe Allrounder** at Peach and Billy

Mar 2022 - Nov 2022 (9 months)

**Cafe Allrounder** at McDonald's

Oct 2019 - Feb 2022 (2 years 5 months)

**Skills** Tutoring, Programming Languages, Electronics, Circuit Design, use of VCSs, working knowledge of the fundamentals of Machine Learning and associated mathematics, knowledge and experience in the design process, experience in the plausibility of mechanical solutions

**Languages** English

**Programming Languages** C++, C, Java, Python and the ability to pick up another within days

**Programming Environments** Terminal, Windows Applications, Arduino, Teensy, FIRST control and expansion hubs, Microsoft Visual Studio and Visual Studio Code, Android Studio, Arduino IDE, Code::Blocks

**Education Bachelor of Computer Science/Bachelor of Engineering (Honours)** from The University of Queensland

Expected finish Jun 2028

Current GPA of 6.4

**Completed High School (Year 12)** from Brisbane Grammar School

Finished 2022

* Received ATAR 97.25 and the
* Music award: Percussion award for excellence in ability.
* Part of the first-place alliance in the 2019 RoboRave Regional robotics competition.

**Licences & certifications Working with Children Check**

Issued by Queensland Government

Valid until Nov 2025

**Provisional Drivers Licence**

Issued by Transport and Main Roads QLD

Nov 4th 2022 – Nov 3rd 2024

**Open Drivers Licence**

Issued by Transport and Main Roads QLD

Nov 3th 2024 – Nov 4rd 2026