Sujan Galpottage | PART III MECHATRONICS ENGINEERING STUDENT

GREENLANE, AUCKLAND

+64-21-221-2997
sujangalpottage@outlook.com
https://www.linkedin.com/in/sujan-galpottage/
https://github.com/SGal205

PROFESSIONAL SUMMARY

I am a third-year Mechatronics Engineering student with a passion for applying innovative engineering solutions to enhance efficiency, sustainability, and real-world applications. With hands-on experience in robotics, control systems, and CAD modeling, I excel in problem-solving, working in teams, and interdisciplinary collaboration. I look forward to contributing to engineering projects that inspire positive change for people and the world around them.

TECHNICAL SKILLS

Possess knowledge of a broad range of programming languages and strategies:

- Object-Oriented Programming (C++)
- Real time Software design
- MATLAB and Simulink simulation
- Low level C Microcontroller programming
- Implementation of control logic such as PD-control, PI control, and P control

Basic technical experience gained through practical modules and design courses:

- Laser Cutting
- Soldering electrical components and dealing with circuitry
- Milling and Turning
- Welding
- CAD modelling

PROJECTS AND UNIVERSITY INVOLVEMENT

2025 – Member of Mechanical and Mechatronics Engineering student association (MECHA)

2025 – University of Auckland Rocketry Club (UARC) member

- Member in L1 Rocket build group (ongoing) working on the modeling and simulation of rocket design using OpenRocket, along with the assembly of electrical, recovery, and structural sub-systems. Experience with H128W rocket motor.

2025 – Arduino Uno R3 ADC module performance Assignment

- Implemented a dual-state Finite State machine using low level C whereby the collection of meaningful data for the quantification of ADC performance at varying pre-scale factors was made easy.

2024 – VEX project

- Implemented software related to the P, PD, and PI control of a VEX robot to achieve precise payload pickup/drop-off of payloads and warehouse navigation.

2024 – Design of Vehicle Rental system

- Encompassed the principles of object-oriented programming to design a command line vehicle rental interface

2024 – Gear Reducer Project

- Designed a gear train module to efficiently convert 960 RPM input motor rotation into conveyor-based linear motion.
- System could transfer 250 kg at 0.45 m/s on a 30° incline for 12+ hours, utilizing a 2:1 reduction ratio chain drive.

EDUCATION

2023 – Current
Bachelor of Engineering (Honors) specializing in Mechatronics| GPA 6.9/9
University of Auckland

- Relevant papers: Design and Manufacture I, Electronics and Signal processing, Control Systems, Software Design, Design of Real-Time Software, Professional skills & communication

2022 – 2022 (Discontinued)
Bachelor of Science specializing in Biomedical Science | GPA 6.7/9
University of Auckland

- Relevant papers: Organ systems, Cellular processes, Population Health, Chemistry of the living world

2018-2021
Cambridge International Examinations AS & A-Level Qualifications
Auckland Grammar School

- A's in Biology, Chemistry, Physics and Mathematics

Extracurricular activities: Badminton, Sri Lankan cultural group

WORK EXPERIENCE

Nov 2023 – Current
Online tutoring
Cluey Learning

- Delivered 100+ one-on-one high-quality tutoring students at Cluey Learning, catering to diverse learning needs and various forms of neurodiversity.
- Employed customized teaching methodologies to foster an inclusive and supportive learning environment, enabling students to overcome obstacles and excel academically.
- Approved in Mathematics, Physics, and Chemistry for up to senior level

Nov 2022 – Feb 2023
(Floating role) Retail Sales Assistant
Noel Leeming

- Multifaceted role including sales, customer service, processing sales at the register, and working in the Storeroom
- Served customers in a fast-paced environment
- Managed stock counts and maintained accurate records, ensuring efficient inventory management
- Actively learned about products and informed customers
- Operated in the storeroom during the busiest period of retail

INTERESTS

- **Personal projects** – Tinkering with microcontroller units such as Arduinos, and assembly of metal models
- **Sports** – I love playing Cricket and Badminton mostly socially. I also enjoy biking and playing chess whenever I can
- **Spending quality time with family**
- **Travelling**