

# Ryuji Kow

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[Personal Website](#) | [Linkedin](#) | [Github](#)

## PROFESSIONAL EXPERIENCES

### Feeveo, Intern

Jan 2023 - March 2023

- Involved in the design and prototyping of an Automated Ground Vehicle(AGV)
- Tasked to manage and integrate control systems on AGV

### NUS, Teaching Assistant

Jan 2023 - April 2023

- Teaching assistant for CG2111A - Engineering Principles and Practices II
- Provide students with advanced knowledge in certain computer engineering concepts.
- Facilitate discussions and practical sessions to reinforce concepts.

### Purely Natural Skincare, Co-Founder

June 2022 - Present

- Developed digital platforms on Shopify, Carousell, and Facebook
- Managed supply chain operations, including inventory control and logistics coordination.

### Reactor School , Trainer and Facilitator

Jan 2022 - June 2022

- Conducted design thinking training programmes for secondary school students
- Facilitated hackathon programmes encouraging start-up ideas
- Motivated to deliver programmes effectively to students

### High Achievers Training Consultancy(Tuition Center) , Intern

May 2021 - July 2021

- Conducted weekly lessons, focusing on the teaching of mathematical concepts and problem-solving skills.
- Prepared and delivered lesson plans, including the creation of worksheets and practice questions.
- Provided individualised attention to students to help them overcome learning obstacles.
- Monitored and evaluated students' performance and progress, providing feedback to parents.

### High Achievers Training Consultancy , Trainer and Facilitator

Dec 2020-June 2021

- Developed communication, management, and team-building skills. Able to implement a variety of training programmes for multiple purposes.
- Imparted valuable life and study skills to students in over 10 different schools

## EDUCATION

### National University of Singapore

Aug 2021 - June 2025(Expected)

- Pursuing a Degree in Computer Engineering
- Cumulative Average Point (CAP): 4.50 / 5.00

### St Andrew's Junior College

January 2017 - December 2018

- Honour(s): Sports leader award, Honour roll for JC2 mid terms (H1 General Paper,H2 physics)

# PROJECTS

## **Autocare, Autonomous Solution for Transport of Blood Components (Ongoing)**

- Developing an autonomous solution for the transport blood components in partnership with Singapore General Hospital(SGH)
- Projected to increase efficiency of transportation of blood components by an average of 60%.
- Conducted extensive market research and interviews with doctors and nurses.
- Solution utilises SESTO magnus AMR with a custom payload designed to transport blood components safely and securely.

## **Big PC-Partpicker, CLI Application**

- A Command Line Interface (CLI) application that streamlines the process of managing computer builds while verifying the compatibility of selected components.
- Built a simple interface that enables easy customization and organisation of PC builds, ensuring component compatibility and budget adherence.
- Application built using Java

## **OIO, Musical Instrument**

- Ideated and Designed a unique musical instrument that utilises physical discs containing music layers, allowing for the mixing of various tracks.
- Integrated PN532 RFID reader, NTAG 213 tags, mouse micro switches, Raspberry Pi 3B+, and breadboard.
- Featured on CDE Day during the projects showcase.

## **FPGA Project, Creative application of concepts covered in module**

- Integrated keyboard and PMOD screen with FPGA.
- Implemented Typeracer game with fixed phrase,measuring and displaying WPM on a seven-segment display.
- Provided real-time feedback with red highlighting for incorrect keystrokes and green highlighting for correct ones.

# Skills

## **Programming Languages**

- C++, C, Python, Verilog, R, Java, Javascript, HTML, CSS

## **Hardware Competencies**

- Arduino, Raspberry Pi, LiDAR, FPGA, Esp32, RFID, Stepper Motors(Modbus)

## **Other Competencies**

- Git, Linux, Microsoft Office, Fusion360, Autodesk Eagle
- Languages: English, Chinese, Japanese