



# Ker Chin Tian

## Final Year Computer Engineering Undergraduate

Aspiring robotics engineer looking to contribute to a meaningful cause with my technical expertise

## Contact

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## Education

2019 - 2023

### Computer Engineering (BEng with Honours), Robotics Specialisation

National University of Singapore  
CAP: 4.85 / 5  
NUS Merit Scholarship  
Dean's List

2022

### Exchange - Computer Engineering

University of Toronto  
NASA Exchange Scholarship

2013 - 2018

### NUS High School Diploma (High Distinction)

NUS High School of Mathematics & Science  
CAP: 4.8 / 5  
Outstanding Student Award - Achievement, Leadership, Service

## Technologies

- Raspberry Pi, Arduino
- Python, Java, C
- ARM Cortex-M, Verilog

## Skills

- Teamwork
- Dependability
- Problem solving

## Experience

### June 2021 - Nov 2021

Zimplistic Pte Ltd (Rotimatic)

#### Embedded Engineering Intern

- Developed an integrated test system to automate the testing of Rotimatic's subassemblies using PyQt and Firebase on a Raspberry Pi interfaced with a router, printer, scanner, camera and a physical switch
- Designed and implemented test scripts for Rotimatic's subassemblies and full assembly using Python's unit test framework
- Built a Modbus test tool to send and receive Rotimatic commands
- Provided technical support to other teams by debugging and fixing the machines

### Mar 2019 - May 2019

Ministry of Home Affairs Singapore

#### Intern

- Reviewed video analytics platforms and surveillance systems around the world to understand industry standards
- Developed real-time face recognition mobile apps using different models and evaluated their performance to determine their suitability in Body-Worn Cameras for uniformed officers
- Assessed the accuracy of Singapore's surveillance platform in detecting various attributes to highlight areas that need improvement or were done well

### Jan 2019 - Feb 2019

Open Government Products, GovTech Singapore

#### Software Engineering Intern

Collaborated with engineers, designers, and managers to develop:

- A webpage and a phone app to digitalise identity cards in Singapore
- A webpage to inform donors of the food levels in food banks and a Telegram bot to match drivers to food delivery requests

### Feb 2017 - Dec 2017 (Part-Time)

DSO National Laboratories

#### Research Intern

Designed a faceted reflectarray antenna to bridge the gap in the existing literature and achieved overall higher efficiencies as compared to similarly sized flat reflectarray antennas

### Sept 2016 - Dec 2016 (Part-Time)

Defence Science and Technology Agency

#### Intern

Developed a Virtual Reality (VR) simulation with HTC Vive using Unity3D for players to learn and practise the necessary emergency procedures when a fire breaks out onboard a ship