



Silvanus Sng

I am a confident and highly motivated person. I have an inquiring mind and always show a keen interest in exploring new strategies, especially in the area of Programming and Electronics. I believe that

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EDUCATION

Singapore Polytechnic – Diploma in Mechatronics and Robotics Engineering

April 2018 - April 2021

Institute of Technical Education – Higher Nitec in Mechatronics Engineering

January 2016 - March 2018

EXPERIENCE

Sick intelligence- Internship Equivalent

April 2020 - August 2020

I was the team leader and lead programmer of the 2021S1 Office transporter group. We were tasked to create a transport that is able to deliver documents around the Sick office in Singapore.

AWARDS

- Cogito Champion Team. Awarded in 2020
- CCA Gold With Honours. Awarded in 2020
- Lee Kuan Yew Scholarship to encourage upgrading. Awarded in 2018
- Lee Kuan Yew Technology Award. Awarded in 2018
- Greenwave Competition good presenter award. Awarded in 2017
- Greenwave competition 3rd place (ITE Level). Awarded in 2017
- International Science Enterprise Challenge Champion Team. Awarded in 2017

SKILLS

Analytical Thinking Skills
★★★★☆

Design Skills
★★★★☆

Mechanical Engineering
★★★★☆

Creative Mindset
★★★★☆

ROS programming
★★★★☆

HTML programming
★★★★☆

LANGUAGES

English
★★★★★

Chinese
★★★★☆

PROJECTS

Floating Energy — [August 2020 - Present](#)

Our project concentrates the energy of the sun and converts it to electrical energy. The solar panels will absorb sunlight with photovoltaic cells generating Direct Current energy. The Peltier will convert the heat energy to electrical energy. The electrical energy harvested will then be converted into usable Alternating Current energy with the help of a power inverter.

Recently collaborated with the ECompany to further develop our prototype.

Office Transporter — [April 2020 - August 2020](#)

SICK Sensor Intelligence has commissioned Singapore Polytechnic to build an office transporter that can navigate around the office environment in their company. This office transporter will essentially function as an office boy/delivery system within the office building to deliver documents and objects around the office.

Walk Free Osteoarthritis — [May 2016 - December 2018](#)

Osteoarthritis is a degenerative disease that most commonly occurs to old people. Osteoarthritis mostly affects the cartilage which is the hard but slippery tissue that covers the ends of the bones where they meet to form a joint. We decide to target the knee as it is an important part of the body we use and people are discouraged to walk due to the pain and are afraid to get surgery to fix it. We designed a knee brace that assists the user in walking.

Autonomous Ice-cream Man — [October 2017 - January 2018](#)

To design a navigation platform which is able to navigate autonomously around the place and able to stop or avoid obstacles along the way. It has sensors to avoid hitting objects. It is designed to be a budget build as our targeted audience are the small medium enterprise in Singapore.

References

- Dr Lim Chee Kian from Singapore Polytechnic
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 - 9760 9620
- Dr Khor Eik Fun from Institute of Technical Education
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