PANG KANG WEI
ROBOTICS APPLICATION ENGINEER

CONTACT

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SKILLS

Mechanical

- **SolidWorks** used to create 3D models, simulate CNC machining, and draft 2D engineering drawings with FAI dimensions

Software

- **ROS2** used to build robot applications, leveraging Python and C++
- **FreeRTOS** development on STM32 (Notes)
- **C++** peripheral development
- **Swift** used to develop iOS application
- **JavaScript , HTML, CSS** used to build web application and websites
- **G-code** used to program CNC machines
- **Linux**
- **Git**

Electrical

- **KiCAD** used to design PCBs
- Soldering and wiring

EDUCATION

Monash University

Bachelor of Robotics and Mechatronics Engineering (Honours)
March 2019 - Dec 2022

- WAM: 71.897

AWARDS

IEEE FYP Competition 2022

- Track 15 (View)
- Track 17 (View)

CERTIFICATES

- Dassault Systèmes Certified SolidWorks Associate in Mechanical Design (View)
- Innovate Malaysia Design Competition (View)
- PCB Design with KiCAD (View)
- Mastering FreeRTOS (View)

WORK EXPERIENCE

Robotics Application Engineer

Weston Robot Pte. Ltd.   July 2023 - Present

- Developed and designed electrical circuits and custom PCBs using KiCAD
- Developed robotic applications using ROS2
- Integrated a variety of sensors using RS485, CAN, and UART interfaces
- Created and maintained documentation for projects and robot platforms
- Delivered hands-on training and troubleshooting support to customers
- Successfully deployed robotic systems across various locations

Associate Software Engineer, Mobile

Soft Space Sdn. Bhd.   Apr 2023 - June 2023

- Developed front-end iOS & Android applications by translating UI/UX designs into functional applications
- Maintained and enhanced existing iOS & Android applications by fixing bugs, adding new features, and ensuring overall app stability

Mechatronics Engineer (Internship)

JKS Engineering (M) Sdn. Bhd.   Nov 2021 - Feb 2022

- Built a conveyor communicator software using Windows Presentation Foundation for parameter setting
- Designed the user interface for the software
- Self-educated C# to program the front-end and back-end
- Programmed one of the conveyor operation modes as known as zero pressure accumulation
- Led the LaTeX development for the production of technical and scientific documentation

PROJECT

Final Year Project

What?
- Integration of technologies to the hydroponics farming system
- Developed a self-monitoring system

How?
- Utilized IoT for remote monitoring
- Programmed a self-monitoring algorithm in python
- Used Raspberry Pi to integrate sensors and actuators
- Developed an iOS application to monitor the environmental conditions

Results
- The system successfully planted Chinese cabbage in 30 days with minimal human intervention