


Tan Kui An Andrew

 B. Eng., Electrical - Mechatronics, [Universiti Teknologi Malaysia](#)
CPGA: 3.90 | Dean's Award | 2016 - 2020

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WORK EXPERIENCE

R&D Software Engineer, [ViE Technologies Sdn Bhd](#)

August 2020 – March 2022

1) Camera SDK

CMake/C++/Qt

- Acted as pioneer software developer and performed feasibility study to kickstart the project from scratch
- Designed and developed a desktop application that is integrated with GenICam standard with fundamental functions such as streaming camera image and configuring camera parameters
- Developed a C++ dynamic library to be delivered to clients for their own applications
- Developed sample programs as part of the SDK for users
- Made use of CPack to package the software and generate an installer for users
- Created and maintained software documentation

2) Energy Monitoring Dashboard

NodeJS/TypeScript(Angular)/PostgreSQL/Docker/Rancher/GitLab CI/CD

- Acted as the main developer for this new product with minimal guidance
- Designed and developed a configurable and flexible web application for monitoring and analyzing electrical usage
- Implemented design patterns for a better code quality and management
- Identified area of modifications and implemented them to improve performance and user experience
- Maintained, updated and deployed the product according to sprint plannings
- Created and maintained software documentation

3) Self-initiated activities

- Developed an Angular Web App for storing documentations such as project setup procedures, flow charts, technical notes and cheat sheets
- Conducted knowledge sharing sessions about GitLab CI/CD, Docker, CMake

Intern, Intel Products (M) Sdn Bhd

June 2019 – August 2019

- Underwent trainings of overall IC Design Flow with the use of different IC Design Tools
- Underwent trainings of FPGA implementations and Pre-Silicon Validation

ACHIEVEMENTS

- Completed Udacity Nanodegree - Robotics Software Engineer, 2022
- New product pioneer in ViE Technologies Sdn Bhd, 2021
- Champion in NI Autonomous Robotics Competition, 2019
- Champion in RoboCup @Home Education League in RoboCup Asia Pacific, 2017

SKILLS

- Practical experience with ROS, Python, OpenCV and Turtlebot2
- Hands-on experience with Linux System and UNIX commands
- Working experience with object-oriented and functional programming in C++ and Javascript
- Working experience with CMake for cross-platform development support in the future
- Working experience with version control, continuous integration and continuous delivery using GitLab
- Working experience with containerised development, deployment and management using Docker and Rancher
- Working experience with front-end and back-end web development using Angular, NodeJS and PostgreSQL
- Working experience in applying Agile practices in a small Agile Team
- Knowledge and practical hands-on with algorithms and data structures through LeetCode problems