



YuSheng Tseng (Chester)

Current Position: Staff Software Engineer

CONTACT

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Github : [cwyark](https://github.com/cwyark)

EDUCATION

National Taiwan University |
Sep 2011 - Oct 2013

*Bio-Industrial Mechatronics
Engineering, Master Degree*

National Chiao Tung University
| Sep 2006 - July 2011

*Mechanical Engineering,
Bachelor Degree*

DOMAIN SKILLS

- Linux OS Software Development
- Board Bring Up and BSP
- Network Protocols
- ROS2 Architecture
- Automotive Sensor Integration
- Web Backend Development

CODE SKILLS

- Object-Oriented Programming
- **C/C++** for Performance
- **Python** and **NodeJs** for Scripting and Backend
- **Shell Script** for System Tooling
- Git Version Control
- Good DevOps Process Knowledge

ABOUT ME

With a decade of experience in software engineering, I've adopted a growth mindset and developed leadership skills to enhance product quality. While the shift from 0 to 1 is a daunting task for many, it doesn't intimidate me. In my previous roles, I've taken on the responsibility of aiding new business units in leading and developing cutting-edge technology. I've successfully integrated these technologies into the company's operations, transforming them into profitable products.

Areas of Expertise:

- Linux system software (low-level driver, kernel and system software)
- ROS2 framework (DDS and sensor fusion)
- Automotive sensor integration and time synchronization. (lidar, radar, IMU, GNSS and camera)
- Network protocols and RTOS software.
- Software performance analysis and improvement.

When tackling challenges, I adhere to five key principles:

- Consider the impact on the project timeline and understand the reasons for resolving the issue.
- Ensure the availability of sufficient tools to address problems effectively.
- Solve problems architecturally, ensuring scalability and flexibility for the future.
- Prioritize clear communication and discussion of solutions with my team.
- Continually learn new things and evaluate their potential for product improvement.

WORK EXPERIENCE

Staff Software Engineer - Farobot Technology | Feb 2023 - Now

- Technical leading on a robot control system and evaluate how to integrate MCS/ MES software.
- Develop a task dispatching and management system on top of ROS2 framework.
- Develop multi-thread application for complex robot actions.
- Develop system software for distributed multi-robot system using Python.
- Write unit tests and system integration tests for software quality assurance in a CI/ CD environment.
- Use Python (FastAPI) for web backend development, created REST APIs for end-user control of our robot management platform.

Staff Software Engineer - ADLINK Technology | April 2017 - Feb 2023

- Develop industry computer BSP and hardware bring up on Nvidia Jetson platform.
- Develop linux device driver and system software on Nvidia Jetson for robotic application using ROS2 and DDS framework.
- Develop SerDes/MIPI (GMSL) camera driver, integrate lidar, radar, IMU and GNSS, to design an embedded solution for Time Synchronized Sensor Fusion using a hybrid hardware setup.
- Benchmarking camera application on AI image processing and autonomous vehicle sensor fusion.

Research Assistant - National Taiwan University | Nov 2016 - April 2017

- Wireless Network Network for Intelligent Agriculture IoT Application
- Investigate Zigbee network researching topics.

Senior Software Engineer - Delta Network Inc. | Dec 2013 - Nov 2016

- Bring up the 1G / 10G / 100G LAN ethernet switch
- Integrate vendor's SDK into EVT/DVT diagnosis and production software.
- Porting Linux device drivers according to customized hardware design.
- Design self-diagnostic software and stressing test in Ethernet switch, to ensure MAC/PHY or peripheral hardware works fine through all EVT/DVT and MP process.