

Tung-Hua Yu

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SUMMARY

Have dual expertise in [computer vision](#) and [network protocol](#). My fearless embracing of challenges motivates me to follow up on new-edge techniques from time to time. I keep doing the three actions—[plan](#), [conduct](#), and [review](#)—to confirm I go toward the goal properly.

PROFESSIONAL EXPERIENCE

Mar 2022 - present (3+ years)

Software Engineer, Arcadyan Technology Corporation, Hsinchu, R.O.C

Router (Embedded Linux)

- Complete [IPTV/Multicast enhancement](#) in [openwrt](#) platform with [broadcom](#) SoC.
Enhance multicast function bringing IGMP querier value (e.g. qqic) from kernel-space to user-space utility.
- Complete [wake-on-lan\(WOL\)](#) proxy service in [prpIOS](#) platform with [broadcom](#) Soc.
Allow wake up LAN host (e.g. laptop) by sending the specific http packet to WOL proxy of the prpIOS router.
- Improve Manufactory Firmware boot time in [RDKB](#) platform with [airoha](#) SoC.
Decrease [62.5%\(75 secs\)](#) boot-time from 120 secs to 45 secs.
- Implement [daily-firmware-build](#) by [Gitlab CI/CD](#) and [docker](#)
Diagnostic the reason of build failure via restoring the build-time environment in docker volume.

Mar 2020 - Mar 2022 (2 years)

Algorithm Engineer, Gingytech, Hsinchu, R.O.C.

Fingerprint Module (Bare Metal Embedded)

- Construct fingerprint ISP / encryption Library
Implement [memory management](#) and [encapsulation](#) features.
Implement a [one-time password](#) feature based on the AES-256 algorithm.
- Matching Performance Web-page
Visualize matching performance with intuitive tables/diagrams on web-page.

Jan 2019 - Jul 2019 (6 months)

R&D Intern, OMRON, Kyoto Japan

Intelligent Factory Application

- Object Detector / Worker Action Classifier
Improved accuracy of the detector based [MASK-RCNN](#) from 80% to 95%.
Achieved accuracy of the Classifier based decision tree to 85%.

EDUCATION

Sep 2016 – Sep 2019

National Taipei University of Technology (NTUT), Taipei

Master, Computer Science

- [Published ICMLC Conference Paper](#)
An Accelerometer-Based Gait Analysis System to Detect Gait Abnormalities in Cerebrospinal Meningitis Patients