Tung-Hua Yu

Email: tunghuayu0@gmail.com **Github:** https://github.com/TUNGHUAYU **BLOG:** https://tunghuayu.github.io/

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 prplOS platform with broadcom Soc.
  Allow wake up LAN host (e.g. laptop) by sending the specific http packet to WOL proxy of the prplOS 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