(TED) LIU Ziying E-mail: tedliuzy@hotmail.com Linkedin: http://www.linkedin.com/in/ted-liu-ziying

Skills

- **Programming Languages:** C, Python, Android, Embedded Linux, DOS, Tcl. **Achievement:** 2nd place in the *Inaugural Singapore Android Developer Challenge 2010*.
- **Communication Protocols:** IEEE 802.11, Multi-AP R1~7, TCP/IP, WiFi 6/7/8.
- **Simulation Software:** MATLAB, LTSpice, ANSYS, Mathematica.
- **Source Control and Quality Control:** Git, SVN, Gerrit, Jenkins, CI/CD, Container, WIKI, JIRA.
- **Business Knowledge:** CFA, Salesforce TrailBlazer/AgentBlazer, High-Tech Marketing and Innovation Management, Knowledge Management, Financial Reporting and Accounting, Enterprise Development.
- **Certificates:** Red Hat Certified Engineer, CCNA, Google Data Analytics, ScrumMaster, Spanish B1.

Work Experience

Realtek Singapore Pte Ltd - 07/2014 to Present

Team Lead/Software Manager - 07/2018 to Present

- Led a team of 23 R&D software engineers, optimizing project resources and enhancing workflow efficiency through Agile tools like CI/CD, JIRA, and WIKI, resulting in improved project tracking and knowledge management.
- Managed project timelines and ensured timely delivery while guiding team members in code design and bug fixing, resulting in improved collaboration between internal R&D team and customer teams.
- Handled administrative tasks, including team status reports, KPI evaluations, and training programs. Source and hire talent, expanding the team from 5 to 23 engineers over the years.
- Reviewed code and check design documents, test plans, and user guides to ensure products meet customer requirements and performance standards, maintaining a competitive edge in the industry.
- Conducted patent discussions, applying for approximately 3 patents each year.
- Enhanced team performance by implementing training programs, organizing morale-boosting activities, and maintaining consistent communication, resulting in improved team's collaboration and productivity.
- Facilitated collaboration among diverse stakeholders, including product managers, project managers, sales and marketing representatives, multiple R&D teams, and field application engineers, driving project deliverables through effective teamwork with internal teams located in Singapore, Taiwan, Shenzhen, and Suzhou.
- Cultivated and maintained strong relationships with telecom customers across Asia, Europe, and Latin America, as well as with original design manufacturers including Huawei, ZTE, Xiaomi, D-Link, TP-Link, Tenda etc, resulting in improved collaboration and enhanced customer satisfaction.

Senior Staff Software Engineer - 07/2014 to 07/2018

- Executed technical R&D tasks encompassing WiFi protocol development, wireless driver creation, PON/AP firmware design, user space development, and system porting and integration, leading to enhanced system performance and improved connectivity.

- Ported EasyMesh protocol and other code across various Linux architectures and different chipsets.
- Developed smart roaming mesh functionality for Singtel home fibre mesh and widely adopted by the global market: [Singtel WiFi Mesh](#).
- Developed Android applications for communication between devices using WiFi and Bluetooth. Created a Network Attached Storage (NAS) solution and migrated it to various Linux-based AP boards, enabling simultaneous AP router and NAS functionality.
- Resolved technical issues for local and international clients both remotely and on-site, facilitating Telco certification and tender compliance while showcasing and advocating our products and solutions to prospective customers.
- Established CI/CD tools and testing environments to enhance product performance. Set up various servers to improve team efficiency and management.

Australian National University (ANU), Researcher - 12/2013 to 04/2014

- Decoded and analyzed packets received from SMA solar panel inverters for utilization.
- Collaborated with researchers from Australia's Information and Communications Technology (ICT) Research Centre of Excellence (NICTA) to design prototypes.
- Designed and developed a low-cost 3G-based PV data logger using Arduino. This project supported the ANU/NICTA solar forecasting collaboration on "machine-learning-based forecasting of distributed solar energy production."

SysEng (S) Pte Ltd, System Engineer - 06/2010 to 01/2012

- Designed and deployed real-time monitoring systems for PUB and NEA.
- Developed a data logger to communicate with various sensors and report to a centralized server: [PUB Water Level](#).
- Led the commissioning of approximately 60 monitoring stations across Singapore.
- Promoted the Singapore Machine-to-Machine (M2M) platform and the Singapore Industrial Automation Association (SIAA), developing systems for demonstration and attending events and meetings to promote industrial Internet of Things (IoT).

Education

- **National University of Singapore (NUS)**, *Master of Science (Management of Technology)*
- **Australian National University (ANU)**, *Bachelor of Engineering (Electronics & Communication)*
- **Singapore Polytechnic (SP)**, *Diploma in Engineering (Computer Engineering)*

Personal Interests

- **Sports:** Mixed Martial Arts, Boxing, Snooker, Badminton, Swimming.
- **Volunteering Activities:** Math coach for low-income families; teach computer literacy class for the elderly.
- **Leisure:** Reading (average one book every three weeks), lifelong learning, and attending conventions.