

ChaoWei Liao

Email: career@cwliao.com

Portfolio: cwliao.com

Phone: +1 (469)-268-6943

LinkedIn: www.linkedin.com/in/chaoweiliao

Experience

Microsoft

Redmond, WA, USA

Senior Software Engineer

Jan. 2021 - Present

- Leading and managing the development of testing strategies for new hardware platforms, ensuring both product quality and manufacturability.
- Translating complex concepts into clear operational instructions and performance specs.
- Supervising OEM/ODM to guarantee manufacturing quality and developed a certification program for operators among our product vendors.
- Reviewed team designs/code to uphold performance and security standards.
- Developed a storage device driver by Rust language for Datacenter units with mission critical functionality.
- Developed and maintain intergraded multi-agent autonomous systems and deploying in Microsoft Azure Datacenter environments, ensure stability of remote automation deploy system.
- Triage and debug issues on Azure HW/SW/FW Stacks.

Microsoft

Pittsburgh, PA, USA

Senior Hardware Test Engineer

Sep. 2020 - Dec. 2021

- Worked with OEM/ODM global wide to developed and intergraded test suite for Microsoft Azure Hardware.
- Organized and implemented test plans for hardware components.
- Triaged and debugged issues on both HW and FW of BMC, IPMI, BIOS, CPU, GPU, VPU, DIMM and NVMe.

Seagate Technology

Minneapolis, MN, USA

Senior Firmware Engineer

Feb. 2016 - Sep. 2020

- Developed hard drive firmware in RTOS environment on ARM Cortex Microcontroller.
- Primary contributor for developing logging and SMART feature in embedded multi-CPU system.
- Experience with SAS, SATA, I2C, SPI, UART and JTAG interfaces.
- Worked in Agile/Scrum Environment, and GIT as version control.
- Applied Failure Modes and Effects Analysis (FMEA) across projects.

Bayer Healthcare

New York, NY, USA

Device R&D Firmware Engineer Internship

May. 2015 - Aug. 2015

- Developed an automatic testing APP on Android for testing glucose meter via Bluetooth Low Energy (BLE).
- Reduced over 94% of testing time from 64 hours/week to 4 hours/week.

Intel

Taipei, Taiwan

Firmware Validation Engineer

Mar. 2013 - Jun. 2014

- Debugged firmware issues over twelve different Intel tablet device platforms.
- Tested and certificated devices on both Microsoft WHCK and Google CTS for over fifteen products.
- Narrowed down, Triage and root-cause the firmware/Software issues.

Ambarella

Hsinchu, Taiwan

DSP Firmware Developer

Oct. 2011 - Jan. 2013

- Developed DSP firmware on ARM11 Dual Cortex platform on RTOS microITRON and ThreadX.
- Improved Face-Object Tracking success rate 40%, reduced power usage 4.2% on Samsung DV. And reduced real-time speed alert delay for CarDV.
- Supported OEM and ODM on site to improve manufactory process.

Air Force

Taiwan

Communication Sergeant

Oct. 2010 - Sep. 2011

- Find/Track/Target Unidentified Aerial Phenomena (UAP) through radar and analyzed with leader team.
- Transmitting the above info to help set artillery positions on field.
- Set up and maintain both wired phone lines and wireless encrypted communication devices, ensure secure transmission of classified information.

Freelance Programmer

Taipei, Taiwan

Software and Firmware Developer

Mar. 2009 - Sep. 2010

- Constructed an Interaction Installation Art Device for Taipei City Government, which use C# connect to webcam for gesture detect and Arduino chip AVR168 for signal control.

Education

The University of Texas at Dallas

Dallas, USA

Master of Science, Major in Computer Science, Data Science track.

Dec. 2015

National Taipei University of Education

Taipei, Taiwan

Master of Science, Major in Computer Science, Embedded System track.

Jun. 2010

Bachelor of Science, Major in Computer Science.

Jun. 2009

Honors & Awards

1st Prize, National Intelligent Robots Contest, Taiwan Ministry of Education

Taipei, Taiwan

- Built a housekeeper robot from scratch, which can be controlled remotely by a Nokia 3310.
- Analyze user command by Dual Tone Multi Frequency (DTMF) receivers' chip HT9170.
- News interview http://youtu.be/sW_bO8OxeQI?t=34s

Skills & Additional

- C, Rust, Embedded System, Azure, ARM, RTOS, Android, BLE, OpenCV, Image Processing.
- Native speaker in Traditional and Simplified Chinese, Intermediate in Japanese and Korean.
- President of Taiwanese Association of Greater Seattle.
- Board member of Formosan Association for Public Affairs Seattle Chapter.
- United States citizens do not require visa sponsorship and willing to obtain security clearance.