



## Experience

**Igis Technology**, Hsinchu County, Taiwan

May 2019 - Present

Senior Engineer

- Optical Fingerprint Sensor Driver & HAL Development
- System Firmware Architecture Design and Development
  - ◆ *BootROM, BSP, Security Update, ISR, IRQ APIs*
  - ◆ *Performance Optimization, Cache, Makefile, Linker Script*
- Implement Command Line Interface(UART) and Porting FreeRTOS
- FPGA/SoC Verification(Digital/Analog)
  - ◆ *UART, GPIO, Interrupt, Timer, TCON, SPI slave*
  - ◆ *DSP, DMA, System Bus, PMU, ADC, WFI, Power Saving mode*
- Tools & Technologies
  - ◆ *Andes N25f/AE250, ICE, Logic Analyzer, Scope, Arduino, Encryption, Hash, Git*

**Phison Electronics**, Miaoli County, Taiwan

Sep 2017 - Apr 2019

Firmware Engineer

- NAND Flash Controller IC HAL Development
- FPGA/SoC Verification(Digital)
  - ◆ *NAND Flash IP*
  - ◆ *Error Handling(Raid)*
  - ◆ *Coprocessor Communication(ARM R5 + Andes N8)*
- Tools & Technologies
  - ◆ *ICE, Logic Analyzer, Synopsys HAPS, Cadence Palladium, Verdi, SVN*

**Montage Technology**, Taipei, Taiwan

Mar 2015 - Aug 2017

Software Engineer

- **Montage Employee of the Year 2016 (the only winner in Taiwan)**
- Implement IoT Applications(SDK) using FreeRTOS and Performance tuning
  - ◆ *UART software Flow Control, AT CMD parser, Transparent Mode(Wifi-to-serial)*
  - ◆ *OTA update FW, Power Saving Mode, software I<sup>2</sup>C Master*
  - ◆ *Porting libraries: MQTT, wolfSSL, axTLS, cJSON*
  - ◆ *AWS IoT Server Connect Applications*
- FPGA/SoC Verification(Digital/Analog) and HAL Development
  - ◆ *GPIO, PWM, UART, I<sup>2</sup>C Slave, USB(UDC, CDC)*
  - ◆ *Timer, PMU, Interrupt, OTP, ADC, DAC*
- Implement IC FT ATE and WiFi Module Mass Production Test Firmware
- Implement CI(Jenkins) and White-box Test Flow
- Tools & Technologies
  - ◆ *C-SKY, ICE, Logic Analyzer, Scope, Digital Control Power Supply*
  - ◆ *FreeRTOS, Linux, eCOS, ROM, Bootloader, SVN*

**Delta Electronics**, Taoyuan County, Taiwan

Jul 2014 - Feb 2015

Firmware Engineer

- Implement Semiconductor Fab Equipment Power Supply
- Implement High-Voltage DC Power Supply
- Tools & Technologies
  - ◆ *DSP, MCU, ICE, PWM, ADC, DAC, Scope*

## Education

**National Taiwan University of Science and Technology**

Sep 2012 - Jun 2014

*Master's degree, Electrical and Electronics Engineering*

**National Taiwan University of Science and Technology**

Sep 2008 - Jun 2012

*Bachelor's degree, Electrical and Electronics Engineering*

## Languages & Tools

*C, Assembly, ISA, Bash Script, Python, Markdown; Vim, Meld, Ubuntu, Sourcetree*

## Certification

*TOEIC Grade: 660*

*GEPT Degree: Intermediate*