

# CHIEN-YI, JUSTIN, LU

## SENIOR DEVELOPER & TEAM LEADER & CODE ENTHUSIAST

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## Technical

C/C++	Python	Javascript / jQuery
Java	SSL protocol / OpenSSL	Bluetooth stack / BlueZ
HTTP / HTTPS / HTTP2	Git / SVN	MySQL
WiFi stack / 802.11x	3G/4G stack / 3GPP	

## Experience

### **Pax Technology** Communications Software Engineer **2016 to present**

Improve the code performance and reduce the memory utilization and code size. Reduce the SSL library's memory utilization from 384k to 32k and code size from 1M to 600k.

Designed SSL protocol (OpenSSL and PaxSSL) based on POS terminals and refactoring the architecture to improve on multiple platforms and projects.

Designed Bluetooth stack base on BlueZ / Linux that supports BREDR and BLE.

Lead a team to maintain the SSL / HTTP library and figure out all problems immediately.

### **Sierra Wireless** Senior Consultant **2015 to 2016**

Develop Automation System for HW/FW testing (Yocto System) and Framework testing (Legato Framework) that use for testing 2G/3G/4G module for Automotive. Drive the certificate of the product and on site support to debug the problem and solve all of problems in Seattle, US. Improve the performance of pretesting and debug the problem, reduce the schedule from three months to one month.

Product validation and certificate, AT&T certification and PTCRB certification.

Develop automation tested equipment system. To use equipment to simulate the CN and BTS and control the device to validate the GSM/WCDMA/LTE protocol and functional feature.

Know how to analyze the 3GPP log and understand the 3GPP technique

### **CieNet** Senior Software Engineer **2014 to 2015**

TCL Project:

Drive the certificate of the product (2G/3G/4G modem router and adapter) and on site support to debug the problem and solve the problem to get TA. Solve the problems in one month and get two TAs from EE, UK. Pretesting and debug the problem for AT&T certificate in Seattle, US.

Handle the project in foreign countries alone. Be a testing engineer, software engineer and project manager to solve all of these customers' problems.

Write test case/test plan, build bugzilla system and develop automated software testing to improve debug performance.

Support to test all 3G/4G products in foreign countries. Support AT&T Project in AT&T lab, Seattle and use instruments, R&S, Anite(Agilent), Anritsu, and Spirent, to pretest the protocol of the product. Support EE Project in UK and figure out all of problems and issues. Support Orange project in France and find out the root cause.

Using Java, Selenium and TestNG to build a framework of automated software testing.

Jiuzhou Project:

Develop embedded system that include Set-top-box application, middle layer, and linux device driver.

Using C/C++ language to develop the firmware based on Broadcom and MTK.

Develop IPTV based on TCP/IP protocol.

### **Pegatron** Senior Software Engineer **2010 to 2014**

Using C/C++ language to design the project that based on Broadcom and Realtek.

Using C language to write the kernel driver to control new hardware.

Using C/C++ language to associate the driver with Framework on WiFi Router and Set-top-box.

Using HNAIP to implement first-generation IoT platform based on WiFi Router for Arris.

Using Java/Eclipse to design Android Launcher on Smart TV.

Support the factory in China to resolve the produce problems.

Using JavaScript, JQuery and HTML to design WebUI to control the products and store the settings in the Flash.

### **Skardin** Software Engineer **2008 to 2010**

Designed Set-top-box (Aka STB) based on Broadcom platform.

Using C/C++ to port the driver on the product.

Maintain the old projects to implement new features and improve the performance.

## Projects

### **IO Stack** [github.com/pcjustin/io\\_stack](https://github.com/pcjustin/io_stack)

Designed a I/O Stack for send/receive message between two processes.

### **Python tools** [github.com/pcjustin/tools](https://github.com/pcjustin/tools)

Programmed some tools for myself.

### **Resume** [github.com/pcjustin/resume](https://github.com/pcjustin/resume)

The resume generator.

## Education

### **Master of Engineering (Computer Science and Information Engineering) 2011 to 2013**

Tamkang University, Taiwan

### **Bachelor of Informatics (Computer Science and Engineering) 2004 to 2007**

Yuan Ze University, Taiwan