**Langhua Yang**

12 Preston Ave

Mt Albert

Auckland

[ylh870721@163.com](mailto:ylh870721@163.com)

021 0879 0234

### Personal Statement

A passionate **C/C++** developer with extensive commercial experience in **Embedded Software Development** using **UML modeling**, **Python scripting and Digia Qt** framework technologies in both windows and **Linux** development environment, with can-do attitude and strong problem-solving abilities. Proven **team player** and result-orientated developer.

### Summary

-**4 years’** experience in **Embedded C/C++** Software Development of more than 3 Years. Solid understanding of **Object Oriented** Programming and **design patterns**.

-**3 years’** experience in **Python** programming, especially in **scripting** for **automated testing**.

-**4 years’** experience with multithreaded programming on **Real Time Operating System** (RTOS).

-Practical knowledge with advanced processors (**ARM/MIPS**).

-Strong understanding and **4 years’** experience of embedded **Linux** operating system.

-Familiar with **Digia** **Qt** Framework development**, UI** applications development for **touch screen** devices.

-Experience in **UML** **Modeling**, experience in writing technical documents using UML tools**.**

-**4 years’** experience in in Embedded Software Development, Maintenance and **Bug fixing**.

-Experience in version control (**SVN**, **GIT**) and **TDD, Unit Testing**.

-Always follow the **coding specification** for readable code and have skill in **code refactoring**

-Excellent research, analytical, evaluation, presentation and practical **problem-solving** skills, and strong goal and results orientation.

### Work Experience

**Embedded Software Engineer (C & C++)**  **02/2012 - 02/2015**

Spreadtrum Communication Inc. (Tianjin), China ([***LinkedIn Page***](https://www.linkedin.com/company/78043?trk=vsrp_companies_cluster_name&trkInfo=VSRPsearchId%3A4344786531456808516680%2CVSRPtargetId%3A78043%2CVSRPcmpt%3Acompanies_cluster))

* Spreadtrum is a semiconductor company that develops mobile chipset platforms for smartphones and feature phones. And I were involved in developing applications for mobile solutions, the products of the mobile solutions I have been worked on included SC6500, SC6531, SC6530, the CPU and the modem of these chips are ARM9 and GSM/GPRS respectively.
* Developed multi-media applications included FM radio, Picture Viewer, Audio Player for cell phones and fixing the corresponding bugs, using **C/C++, Visual Studio, STL, Digia Gt**.
* Using **UML tools** to visualize and document C++ application systems.
* Using **Python** as **scripting** language for **automated testing** and Monkey test.
* Using **Valgrind** and **Trace32 simulator** to detect and resolve **memory errors**.
* Using **SVN** and **Git** to do version control.
* Participated in the writing of **code specifications**.
* Participated in applications **integration** and **testing**.
* Involved in development of facebook and twitter applications independently based on feature phone platform (C/C++ programming), implemented most of the features of the facebook and twitter websites, integrated the applications and handled the interaction with other applications of the mobile system;
* Involved in **requirement analysis** and **test cases design**.
* Using **TDD** development and **Unit test**.
* Participated in UI development, using network APIs and parsing Json/XML data
* Involved in **Code Migration** of FM radio, Picture viewer, Audio-Player and browser modules between different generations of mobile chipset-based platforms, included SC6500, SC6531, and SC6530.
* Involved in **Code Refectory** of multi-media modules of mobile system, converted parts of the C code to C++ code.

**Video firmware Engineer (C/C++)** **07/2010- 07/2011**

Beijing Celestial Semiconductor Co., Ltd. China ([***LinkedIn Page***](https://www.linkedin.com/company/89357?trk=tyah&trkInfo=clickedVertical%3Acompany%2CclickedEntityId%3A89357%2Cidx%3A1-1-1%2CtarId%3A1456809283969%2Ctas%3ACelestial%20sem))

* Celestial Semiconductor is a company which aims to provide an overall ARM-Based and MIPS-Based solution of high-definition video decoding chipset platforms for DTV and IPTV. And I have worked in the video firmware developing team with 6 colleagues.
  + - * Involved in **firmware** development according to the product design, assisted the hardware developers and the application developers to do system development and debugging, using **C/C++, Visual Studio, VC6.0** in both Windows and **Linux** environment;
      * Code **maintenance** and **optimization** to support the second development to handle the requirement changes;
      * Involved in **test cases design** and **performance** and **robustness** testing.

### Academics

**Postgraduates Diploma in Computing** Feb 2015 – April 2016

Unitec Institute of Technology, Auckland

**Master of Electronic Information Engineering** Sept 2009 – Feb 2012

Tianjin University, Tianjin, China

**Bachelor of Electronic Information Engineering** Sept 2005 – July 2009

Xidian University, Xi’an, China

### Technical Skills

-Core Technology: Embedded system, **C, C++, C#, and JAVA**.

-Operating System: Windows, **LINUX**.

-Programming Language: C, C++, C#, Java, **SQL**, R, MATLAB, and **Python**.

-Software Development tools: **Visual Studio**, Eclipse, Source Insight, **SVN**, and **Git**.