# Shu-Wei (Wayne) Hsu

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#### **EDUCATION**

■ M. S. in Computer Science at University of California, Davis 09/2012 – 12/2014

M. S. in Electrical Engineering, Computer Science Group at National Taiwan University, Taiwan 09/2007 – 06/2009

### **WORK EXPERIENCE**

Quanta Innovation Center, Quanta Computer Inc., Android Developer

07/2009 - 05/2012

- Android OS/SDK, Android App/Service/Widget Development, Framework Customization, and GMS Integration, IM.
- Collaborated with UI/UX design team to build responsive viewing experience on devices with different resolution and dpi.
- Optimized applications by communicating well-divided UI and work threads/components following MVC model to enhance product performance and user experience.

• Customized Android UI framework of devices for different markets from Éclair to Honeycomb.

Yen Tjing Ling Industrial Research Institute, NTU, Assistant Lecturer
 Digital Education Institute, Institute For Information Industry, Assistant Lecturer
 06/2009 – 05/2012
 06/2009 – 05/2012

• iPhone (iOS) Basic/Advanced Application Development Program

- Objective-C, MVC-Model, Design Pattern, NS\* class, Key-Value Coding, View Elements, Gestures and Touch Events, Core animation, and OpenGL, Core Data, SQLite, Property List, File System, Languages, Web Applications.
- 50+ tutorials for iOS application development, including basic concepts, software structures, and implementation details. Gave lectures and instructed students to solve problems of extended programming examples.

■ **iPhone Application Programming/Development,** "Dr Soul" at App Store (Taiwan Only) http://itunes.apple.com/app/dr-soul/id420397376?mt=8

06/2011

Android Application Programming/Development, "FantaisieCAM" at Android Market https://market.android.com/details?id=com.fantaisie.camera And Blackberry Market

01/2012

OLPC Business Unit, Quanta Computer Inc., Intern

07/2008 - 09/2008

#### **SPECIALITIES**

Fields: Computer Graphics, Visualization, Big Data Analysis, Mobile/Embedded App Development, HCI

Programming: C, C++, System-C, Objective-C, Java, Verilog, HTML, CSS, Javascript, Python, Latex

Operating Systems: Linux, uCLinux, OS/2, Mac OS, iOS, Android, Win XP/7/8, WinCE
Database/Data structures: Core data, MySQL, SQLite, Property List (MacOS, iOS), XML, Json
QT, Cocoa, Cocoa Touch, Android Frameworks, D3.js, THREE.js, Node.js

Graphics/Animations: Core Animation, OpenGL, OpenGL ES, SVG

Applications/IDE: Xcode, Eclipse, Altera Quartus II, ModelSim, CorelDRAW, QT, IntelliJ IDEA, Pycharm, Git, SVN

Others: Regular Expression, ICE, Electronics, Automatic Control

#### RESEARCH EXPERIENCE AND SCHOOL PROJECTS

A Visual Approach for Name Disambiguation in Coauthorship Networks
 02/2014 – Current

Sociology Department with Vidi Lab, Computer Science, UC Davis (paper submission to Pacific Vis)

■ ITS Trip Logger - An Innovative Driver Identification Approach for Data Collection 04/2014 - Current

Institute of Transportation Studies with Vidi Lab, Computer Science, UC Davis

Taiwan Stock Market Transaction Analysis and Visualization 03/2013 - Current

Academia Sinica with Vidi Lab, Computer Science, UC Davis

**Production Line Data Visualization** 10/2013 – 12/2013

Industry collaborator with Vidi Lab, Computer Science, UC Davis

Network Security SoC Design 09/2007 – 06/2009

Axtronics with PEC Lab, Graduate Institute of Electrical Engineering, NTU

• Network Intrusion Detection for Snort 2.4,2.6, 2.8 (With Hardware Acceleration)

Teaching Assistant

09/2007 – 12/2008

Embedded Linux Implementation Program, Yen Tjing Ling Industrial Research Institute, NTU

• Embedded Linux, Kernel, Drivers, Applications, File System, and QT

# **PUBLICATIONS**

- Master Thesis, Shu-Wei Hsu and Sheng-De Wang, "A Fast Two-Phase Multi-Character Dynamically Reconfigurable Regular Expression Matching Architecture", 2009.
- Proofreader of "**Objective-C** 與 **iOS** 開發入門" (Introduction of Objective-C and iOS Development, ISBN: 9789866432361) by Michael Pan <a href="http://www.blueocean.com.tw/BookArea-bookdetail.asp?SN=BO1201">http://www.blueocean.com.tw/BookArea-bookdetail.asp?SN=BO1201</a>

### GPA

- Graduate Grade (Master Degree at University of California, Davis) Average GPA 3.61/4.0
- Graduate Grade (Master Degree at National Taiwan University) Average 86/100 (GPA 3.89/4.0)

### PERSONAL LINKS

- LinkedIn: <a href="http://www.linkedin.com/in/swhsu/">http://www.linkedin.com/in/swhsu/</a>
- Homepage: http://wayne.cs.ucdavis.edu
- iOS Development Tutorials (GitHub): <a href="https://github.com/fantaisie64/iPhone-Development-Program">https://github.com/fantaisie64/iPhone-Development-Program</a>