Shu-Wei (Wayne) Hsu

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EDUCATION

- **M. S. in Computer Science** at *University of California, Davis*   *09/2012 – anticipated 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   *06/2009 – 05/2012*
  Digital Education Institute, Institute For Information Industry, Assistant Lecturer   *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)   *06/2011*
  http://itunes.apple.com/app/dr-soul/id420397376?mt=8
- **Android Application Programming/Development,** "FantaisieCAM" at Android Market   *01/2012*
  https://market.android.com/details?id=com.fantaisie.camera And Blackberry Market
- **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
Frameworks/libraries:	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, Electrics, 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 PacificVis)
- **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   http://www.blueocean.com.tw/BookArea-bookdetail.asp?SN=BO1201

GPA

- Graduate Grade (Current Graduate Program at UC Davis) Average GPA 3.60/4.0
- Graduate Grade (Master Degree at National Taiwan University) Average 86/100 (GPA 3.69/4.0)

PERSONAL LINKS

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