

# Ron Huang

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## Summary

Seasoned software engineer with usability and user experience in mind. Led and participated various projects and international competitions. Demonstrated talent for analyzing problems and finding innovative solutions. Familiar with human-computer interaction, various programming languages and platforms. Highly motivated, always staying connected with the latest trends in leading technologies.

## Experience

### Software Engineer

July 2016 - Now

HP Inc., Taipei, Taiwan

- Transform traditional web applications to cloud-native architecture, and migrate them from on-premises to AWS with zero downtime and zero data loss.
- Design and implement utilities for updating Thunderbolt firmware on both Windows and Chrome OS. Reduce update duration from 30 minutes to 3 minutes.
- Design and implement software development kit for HP collaboration devices (e.g. Elite Slice, keyboard, dock) and collaboration technologies (e.g. Microsoft Skype for Business, Cisco Jabber) to offer the best conferencing experience.
- Migrate traditional Win32 applications to Universal Windows Platform (UWP).
- Design and implement new continuous integration (CI) and continuous delivery (CD) pipelines for new application platforms (UWP, iOS, Android, AWS).

### Software Engineer

June 2013 - April 2016

Hewlett Packard Enterprise (Hewlett-Packard), Taipei, Taiwan

- Design and implement web services for system test automation (test case management, resource allocation and orchestration, job scheduling and execution) used by HP and other vendors.
- Design and implement DevOps processes, including repeatable development environment with Vagrant and Puppet, continuous integration pipeline with Jenkins, release management with Git and Maven, network monitoring with Nagios.
- Responsible for integrating applications with homegrown Linux distribution and platform, which involves package creation, installation and upgrade, high-availability cluster management, backup and restore, authentication and authorization.
- Develop test tools for server virtualization (Microsoft Hyper-V and VMware vSphere).

### Staff Engineer

October 2011 - December 2012

Generalplus Technology Inc., Taipei, Taiwan

- Port Android onto custom designed ARM system-on-a-chip solution.
- Develop build system for Android to support complex requirements from customers.
- Refactor porting process to comply with Android standards and idioms. Reduce porting time frame between major Android releases from weeks to days.

### Ph.D. Student

July 2009 - June 2011

National University of Singapore, Singapore

- Work on *Software Patterns of User Experience*, a collection of best practices within the user experience design domain targeting software developers.

### Advanced Software Engineer

December 2007 - June 2009

Sunplus mMedia Inc., Taipei, Taiwan

- Develop GUI software development kit for digital photo frame solution.

**Software Engineer** February 2005 - December 2007  
Compal Communications Inc., Taipei, Taiwan

- Port in-house and off-the-shelf GUI frameworks onto feature phones.
- Develop C-based object-oriented GUI framework for feature phone.

**Skills**

**Languages:** C#, Python, C, C++, Lua, TypeScript, JavaScript, YAML, JSON, XML, HTML, CSS, Bash, PowerShell, Elasticsearch

**Tools:** Git, regular expression, Docker, npm, webpack, MSBuild, AWS CloudFormation, Vagrant, Puppet, Jenkins, Makefile

**Frameworks / Platforms:** .NET Framework, .NET Core, Win32, WPF, UWP, React, AWS

**Education**

**M.S. Computer Science** December 2004  
University of Southern California, Los Angeles, California, USA  
Major GPA: 3.95, Area of study: Human-Computer Interaction

**B.S. Electrical Engineering** June 2002  
National Taiwan University, Taipei, Taiwan  
Major GPA: 3.73

**Awards** (Selected)

**NUS Research Scholarship** July 2009  
National University of Singapore

**Honorable Mention** June 2006  
Google Desktop Gadget Contest, Google

**Fifth Place** June 2001  
2<sup>nd</sup> Annual Computer Society International Design Competition, IEEE

**Publications** (Selected)

**Software Patterns of User Experience: Giving Software Developers More Say in the Design Process** Jun 2011  
5<sup>th</sup> Conference on Designing Pleasurable Products and Interfaces, Milan, Italy  
Yih-Lun Huang and Tim Marsh

**Investigation of Software Patterns of User Experience** November 2010  
7<sup>th</sup> Conference on Advances in Computer Entertainment Technology, Taipei, Taiwan  
Yih-Lun Huang, Tim Marsh and Adrian David Cheok

**Side projects** (Selected)

**Where is Makkah** → <https://github.com/ronhuang/where-is-makkah> July 2011  
C#, XAML

- Windows Phone 7 app that shows the direction to Makkah (Mecca).

**Vistroller** → <https://github.com/ronhuang/vistroller> May 2011  
C, Java, C++

- Arduino shield that captures inputs from PS2 controller and renders augmented reality markers onto the connected LCD panel in real-time.
- Android library for translating captured markers (from Camera) into key events.