#### Chien-An "Zero" Cho

itszero@gatech.edu http://itszero.org mobile: +1-415-343-5156

#### **EDUCATION**

Georgia Institute of Technology, USA

2012/08 - Now

PhD Degree / Computer Science – Advisor: Calton Pu

National Tsing Hua University, Taiwan

(GPA: 4.0) 2010/09 - 2012/06

Master Degree / Computer Science - Advisor: Pai H. Chou

National Central University, Taiwan

(GPA:3.1) 2006/09 - 2010/06

Bachelor Degree / Communication Engineering

#### RECENT WORK EXPERIENCE

Twitter Inc.

Contractor

San Francisco, California, USA

Software Engineering Intern

May - July 2012 Taipei, Taiwan

KKBOX Inc.

January - August 2012

Used Techs: HTML5, JavaScript, C#, Java(Android) – Implmented custom UI controls for Android and perform various technical research topics on Windows Phone 7 and HTML5 gaming

Mediatek Inc.

Hsinchu, Taiwan

Summer Intern July - August 2011

*Used Techs:* C, Python – Developed an GNU debugger(gdb) extension which enabling it to work on smartphone memory dump. It allows engineers to investigate the very same crash site as testing team encountered.

hypo.cc

Taipei, Taiwan

Developer

Feb 2008 - Sep 2011

Used Techs: Ruby on Rails, Cappuccino, Javascript, Objective-C(Mac/iOS), Java – Developed an interactive photo-album editor framework for all products. Maintained in-house tools for shipping, printing invoice and PDF generation for Mac OSX. Built a scalable queueing system to handle large amount of PDF/preview generation.

#### SELECTED AWARDS

#### Taipei Fun Mobile Application Contest 2011

Taipei City Government

First Prize

Work: TaipeiFever – Travel Guide app for Android. Available on the Google Play. Featuring offline touring and history information, offline map and Wi-Fi hotspot finder.

#### Embedded System Contest 2011

Ministry of Education, Taiwan

Honorable Mention

Work: Home Appliances Remote using Argumented Reality

#### Telecom Innovation & Application Contest 2010

Chunghwa Telecom, Taiwan

Honorable Mention

Work: Home appliance monitoring and controlling system using wireless sensor network

#### MobileHero Android Software Contest 2009

Ministry of Economic Affairs

Second Prize and Google Prize

Work:KerKerInput – It's an Android Chinese input method framework that simplifies the Android IME interface to the developers. Source code available on my github.

#### Telecom Innovation & Application Contest 2009

Chunghwa Telecom, Taiwan

 $Frist\ Prize$ 

Work:SLIMA – Location-based photo blogging system with timeline concept

#### **PROFICIENCIES**

• Language: Ruby, Objective-C, C/C++, Python, Java, PHP, SQL, JavaScript

• Natural Language: Fluency in Mandarin

Full portfolio: https://itszero.org/resume

#### SELECTED PUBLICATIONS

- Chih-Lin Hu and <u>Chien-An Cho</u>, "User-provided multimedia content distribution architecture in mobile and ubiquitous communication network", Journal of Network and Computer Applications, Vol. 34, pg. 121-136, January 2011 [DOI: 10.1016/j.jnca.2010.08.010] [Paper]
- Chih-Lin Hu, <u>Chien-An Cho</u>, Chang-Jung Lin and Chen-Wei Fan, "Design of mobile group communication system in ubiquitous communication network", IEEE Transactions on Consumer Electronics, Vol. 56, pg. 88-96, February 2010 [DOI: 10.1109/TCE.2010.5439130] [Paper]
- Chih-Lin Hu and <u>Chien-An Cho</u>, "A Novel Mobile Content Delivery Scenario with Simple Double-Key Secure Access Control", International Journal of Security and Its Applications, Vol. 3, No. 1, pp. 1-16, January 2009. [Recommended by UMCâĂŹ08] [Paper]
- Chih-Lin Hu, <u>Chien-An Cho</u> and Po-Jung Wang, "CONTENT SHARING AND DELIVERY IN AN INTEGRATED NETWORK ENVIRONMENT", US Patent App. 12/458,617, Submitted Jul 17, 2009
- Chih-Iin Hu, <u>Chien-An Cho</u>, Chen-Wei Fan and Chang-Jung Lin, "SYSTEM AND METHOD FOR MOBILE GROUP POSITIONING", US Patent App. 12/654,050, Submitted Dec 9, 2009

#### SELECTED OPEN-SOURCE PROJECTS

#### CameraPaper

Main Contributor

https://github.com/itszero/CameraPaper Java, Android, JNI, Image processing

- An android live wallpaper that makes your phone "transparent" by showing live camera feed as wallpaper
- More than 31,000 users has downloaded it from Google Play Store

#### HypoWWDCBroadcast

Main Contributor

https://github.com/hypo/HypoWWDCBoradcast Python, AppEngine, large-scale web

- A Google AppEngine backed website for streaming Apple WWDC text broadcasting
- 150 requests per second is achieved without any service disruption during the broadcast

#### MetaLoc

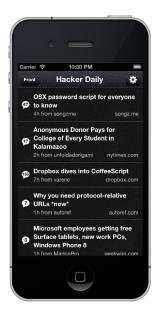
Main Contributor

https://github.com/itszero/MetaLoc Android, Embedded System, Google Maps

- A fun side-project that shows nearby map on the MetaWatch
- Implemented a smart power saving technique that adjusting the update interval in correlation of your moving speed

# Coding Examples

# Mobile Apps



## HackerDaily AppStore / \$1.99

An elegant Hacker News reader application for iPhone. Spent a lot of time to design and implement an high-quality interface. A large portion of time is used for improving user experiences, such as implementing infinity scrolling list and client-side document parser. A second version is coming with better integration with "Reader View".



### TaipeiFever Google Play / Free (Ad-support)

I teamed up with 2 of my friends to make this app, and we won a first prize for a Taipei City Government contest. We designed and implemented this Metro-esque UI on the Android. We spent a lot of time to make this UI can adapt dynamically to all kinds of Android phones with different screen resolution. We used lots of open data sources, such as OpenStreetMap and Wikipedia.

#### Website



# Wide http://hypo.cc/default\_en.html

Hypo is a Taiwan-based web startup. I was one of the senior engineers in Hypo. We provide an interactive online web-album editor to users. User can import their photos from flickr, arrange photos on the website with precise preview. We will then print the book out and deliver it to the user. I designed the system architecture for this website and implemented both front-end and back-end of this website using Ruby on Rails. I also built a scalable queue system for serving previews and generating PDF files.

# Open-Source Projects

I also have a lot of open-source projects available on the github. My profile can be found at https://github. com/itszero/ . I will name a few projects here.



# TwTrk | http://twtrk.itsze.ro/

TwTrk is a webapp that sync your twits to a social network popular in Asian called Plurk. I made a terminal emulator in JavaScript and wrote messages in the website using ANSI.

javacomplete-vim | https://github.com/itszero/javacomplete Javacomplete is a vim plugin that extend OmniComplete to support Java. I forked the project and extend it to further support Android projects. My plugin can automatically find the Android project root and infer all 3rd-party libraries used by the project. It was accomplished by tapping into the ant build system.