# JiaHeng Zhang

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#### **EDUCATION**

University of Southern California, Los Angeles, CA

Aug. 2014 - May. 2016 (Expected)

Master of Science, Computer Science

- GPA: 3.8/4.0

Xidian University, Xi'an, P.R. China

Aug. 2010 - Jun. 2014

Bachelor of Engineering, Computer Science and Technology

- GPA: 85/100 overall, 89/100 major
- Scholarship: Xidian University Scholarship 2011 2013, CASIC Scholarship 2011, CASC Scholarship 2013

#### **SKILLS**

Languages – C, C++, C#, Java, Python, Scala, R, Matlab, VB, PHP

Platforms – Windows, Android, WinRT, Linux, UNIX

Tools - Visual Studio, Git, Vim, OpenCL, Photoshop, Lightroom, LaTeX, Microsoft Office

Other - Photography, Team Leadership, Student Organizations, Musical Instruments

#### **WORK EXPERIENCE**

Microsoft Research Asia (MSRA), Beijing, P.R. China

Jul. 2013 - Jan. 2014

Engineering Intern, Innovation Engineering Group

- Participated in development of FaceSwap, a project for swapping faces in photos;
- Implemented face detection, automatic alignment and manual alignment with constraints based on the latest face technologies from MSRA research teams;
- Improved performance and re-designed user interface (UI) and user experience (UX);
- Tested and documented the program.

## **RELEVANT PROJECTS**

**Bookit** Jun. 2011 - May. 2014

http://bookitapp.org (Chinese), Team Leader, Designer, Developer

An application to help users to get library collection information using keywords or bar code of a book, consisting of server backend and multiple platform clients (Windows Phone, Android, iOS, Chrome, Firefox).

- Implemented to fetch data from over 100 libraries in server with PHP and MySQL;
- Developed client apps for Windows Phone and Android with C#/XAML and Java;
- Publicized and promoted the app, leading to over 20 thousand downloads among college students in China.

NLM Parallel Sept. 2012 - Dec. 2012

An application of my research result on parallelized Non-local Means (NLM) algorithm with heterogeneous computing based on OpenCL.

- Analyzed serial NLM algorithm and designed a parallel scheme to speed up the algorithm up to 600x;
- Designed architecture of the program and implemented communication with GPU;
- Implemented compatibility with multiple operating systems: Windows, Mac OS X and Linux;
- Authored and published A Solution for Speeding up Non-local Means Denoising Algorithm by GPU on HPC China
  2013 (National Annual Conference on High Performance Computing).

TencentCrawler Mar. 2014 - Dec. 2014

A parallel web crawler for getting user comments of Tencent products from app stores, forums and weibo, and financial news from news providers.

- Designed, implemented the crawling logic, data storage, parallelization and programming interface.

### Drug Logistics Management System based on RFID

May 2011 - May 2012

A project aimed to improve the effectiveness and authenticity in drug logistics with a unique encrypted RFID label stuck on drug package.

- Participated in designing database, programming web interface and server backend of the system with LAMP.

## **HONORS**

- CCF Outstanding Undergraduate Award, China Computer Federation (CCF)	Aug. 2013
- First Prize of Microsoft Student Challenge, Microsoft Research Asia	Apr. 2012
- Third Prize of Imagine Cup (China regional), Microsoft	Apr. 2012
- First Prize of China Undergraduate Mathematical Contest in Modeling, Ministry of Education	Sept. 2012
- Excellent Program of National Students' Innovative Experiment Program, Xidian University	Jun. 2012