## Falcon Dai

## **Education**

The University of Chicago, Chicago, IL

GPA: 3.76. graduated in June, 2012 with Honors B.S. in Mathematics and Honors B.A. in Physics.

## **Experience**

**New Venture Challenge**, Booth School of Business, University of Chicago, IL *Contestant*, October 2011 - January 2012

- > Originated the idea of a mobile business that improves shopping experience by providing in-store item locations.
- > Drafted a formal business proposal including market research and revenue projection with teammates.

## Summer Research Experience, University of Chicago, IL

Technical Support for Large Area Multichannel Plate Photo Detector Project and Quantum Computing Project, June 2009 - September 2009, June 2010 - September 2010, June 2011 - September 2011

- > Modeled the secondary electron emission process, implemented simulation programs, and analyzed experiment signal data.
  - > Learnt basic concepts and theories in signal processing and printed circuit board design.
  - > Familiarized collaborating in a team with relatively flat organizational structure.

## Computer Science Department and Mathematics Department, University of Chicago, IL

Grader for Introduction to Programming (C++), Introduction to Scientific Computing and Honors Calculus, October 2010 – November 2011

> Graded more than 30 students' work per week with detailed corrections, comments and guidance.

# **Cross-Strait Student Leader Conference**, University of Chicago CCCI, Chicago, IL *Organizer*, January 2010 – August 2010

- > Organized the event with teammates and designed the field research component as a group leader.
- > Created and maintained the event website which hosted a live webcast.

## Honors

- > Student Marshal of Class 2012 (a University distinction given to the top 5% of the graduating class)
- > Finalist in University of Chicago's on-campus Mobile App Challenge Contest, 2012
- > James Franck Institute Summer Undergraduate Research Fellowship, 2011
- > Co-founder of the Engineering Society at University of Chicago, 2010
- > 23rd team (out of 138 teams) at International Collegiate Programming Contest (ICPC) regional, 2010
- > 2<sup>nd</sup> team at Alamo regional Science & Engineering Fair; Honorable Mention at Texas state, 2007

#### Skills

- > Programming: languages (Python, Java, C++, Matlab script), Android apps (ADK), networking applications (via TCP/UDP communications), multi-threading/multi-processing apps, web apps frontend (HTML5, CSS3, Javascript, jQuery) and backend (Flask, PostgreSQL), visualization (WebGL, OpenGL), data visualization (d3js).
- > Graphic design work (SVG, Inkscape, Photoshop) and visual art.
- > Software acquaintance: Eclipse, Git, Mathematica, Octave/Matlab, LaTeX, Inkscape, Windows, Linux.
- > Fluent in Mandarin and Cantonese.

#### Interests

- > Personal: travel, photography, cooking, drawing, fixing electronics.
- > Academic: artificial intelligence, machine learning, computer vision, cryptography, quantum mechanics, logic.