

# CONG LIU [cong-liu.me](http://cong-liu.me)

780.965.1202 [congliu.thu@gmail.com](mailto:congliu.thu@gmail.com)

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## SUMMARY

Fast-learner and enthusiast for new technologies. Passionate in building high-performance data structures, algorithms and systems. Solid experience with OO design and web services.

## SKILLS

- Proficient in Java, Spring, Hibernate, Tomcat, MySQL, RabbitMQ, EhCache
- Experience with Android SDK, C++, Linux Shell, Meteor.js, Python
- Deep understanding and solid practice in Agile SDLC using Scrum methodology

## EXPERIENCE

### Software Developer

iWellsite Automation Inc., Edmonton, Canada 2015.1 – present

- Managed three projects using Scrum methodology and had full-stack experience in both back-end and front-end development
- Participated in the architectural design of the software system and played a key role in designing the data synchronization and caching mechanisms
- Significantly enhanced data integrity and resource allocation of the system by developing a data synchronization framework for distributed autonomy systems

### Freelancer Developer at Toptal

2014.12 – 2015.1

- Developed an Android app “Livestock Manager”, facilitating the transactions of the livestock business with innovative technologies such as RFID scanning

### Research Assistant

2012.9 – 2014.9

University of Alberta, Edmonton, Canada

- Proposed novel approximate arithmetic circuits for image processing applications, showing 3X speed acceleration and 80% power saving

### Android Developer

Tsinghua Future Communication Program, Beijing, China

2010.10 – 2012.2

- Designed augmented reality algorithms for the Android app “Hello World”, global runner-up of Ericsson Application Awards 2011

## EDUCATION

### M.S. in Electrical & Computer Engineering

2012.9 – 2014.11

University of Alberta, Edmonton, Canada GPA: 3.9/4.0

### B.E. in Automation

2008.8 – 2012.7

Tsinghua University, Beijing, China GPA: 3.9/4.0

## PUBLICATIONS

- [1] C. Liu, J. Han and F. Lombardi, “An Analytical Framework for Evaluating the Error Characteristics of Approximate Adders,” *IEEE Transactions on Computers*, 2014.
- [2] C. Liu, J. Han and F. Lombardi, “A Low-Power, High-Performance Approximate Multiplier with Configurable Partial Error Recovery,” *DATE 2014*, Dresden, Germany.