# Jessie(Dehui) Kong

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#### **Technical Skills:**

- Agile methodologies
- HTML5/ CSS/ DOM
- Database (MySQL)
- Git/Perforce/SVN

- Tomcat/Glassfish
- RESTFUL
- Regular expression
- JSON

- Data mining
- Computer network
- Linux development environment

## **Programming Languages:**

- Proficient in Java
- Proficient in C++/C
- Experienced in JavaScript
- Experienced in Python
- Experienced in R

#### **Education:**

- Queen's University Master of science: Computer Science Sep. 2015 Jan. 2016
   Kingston, ON, Canada GPA: 4.15/4.3 (Transferred from Concordia University)
   Major courses: Data mining, Formal methods in software engineering, Mining software repository, Computational complexity.
- Concordia University Graduate Program: Computer Science Sep. 2014 April 2015

  Montreal, QC, Canada GPA: 3.9/4.3

  Major courses: Computer network, Artificial intelligence, Advanced database system.
- Shanghai Jiaotong University Bachelor of Engineering: Information Security
   Shanghai, China
   Outstanding graduate of Shanghai Jiaotong University

## **Employment:**

- Synopsys Co. Ltd Software R & D Engineer Shanghai, China June 2012 June 2014 Skills: C/C++ programming, Linux development environment, Perforce, cross-culture/cross-team communication skill.
  - ✓ Co-implemented a unified data structure for multiple EDA tools; bug fixing; feature enhancement.
  - ✓ Applied for a job rotation to a testing group for 3 month: worked on automated regression tests.
  - ✓ Cooperated well with team members from cross-cultural backgrounds (US, India).
- Ericsson Software Testing Engineer Intern Shanghai, China May 2011 Aug. 2011

  Skills: wireless communication protocols, functional test, agile developing environment
  - ✓ Developed automated test cases using TTCN-3 to ensure the existing functionalities of Ericsson's Servicing GPRS Support Node (SGSN) are not broken.
  - ✓ Self-adapted to an agile product development process; working collaboratively in small cross-functional teams.

## **Course Projects:**

#### • Junk email filtering (Java)

Use machine learning technique - Naïve Bayes prediction model to implement a junk email classifier, and achieve 95% accuracy.

### Software bug prediction (Python, R)

Extract software metrics and bug information from open source software repository using python; leverage the software metrics to build models (SVM, Logistic Regression) in R and predict the bug-proneness of a source code file.

### Data mining project (R)

Use machine learning techniques (random forest, hierarchical clustering, topic modeling) to discover interesting information from given datasets.

## Computer network project (C++)

Implement file transfer protocols between clients and a server, which include TCP protocol, UDP "stop and wait" protocol with a tolerance to packet loss, and a UDP protocol with error recovery.

### Database project (Java)

Implement a sort-based "join" of two relations with limited main memory, which are essential for a relational database management system.

### Dynamic IP traceback for DoS attacks (NS2)

Use the dynamic packet-marking technique to trace the attacking paths under a simulated environment.

#### **Volunteers:**

# • Volunteer for Shanghai World Expo

Sep. 2010 - Oct. 2010

Work as an undergraduate volunteer in Expo Site for one month. Cooperate with my colleagues and help thousands of tourists find proper Expo traffic lines to their destination.