#### CUONG T. DONG-SI

1618 Coraltree Pl, San Jose, CA 95131 dongsi.tuecuong@gmail.com (408)-646-0077 Github: https://github.com/tdongsi Website: http://tdongsi.github.io/

**Summary** 

Motivated software engineer with excellent problem solving skills looking for software developer positions.

Skills

Languages: Java, C/C++, Python, Perl, SQL, XML, XQuery, HTML.

Java stack: Guava, Spring, JDBC, SLF4J, JUnit/TestNG, JMockit, Ant, Maven, Gradle.

Other Lib.: ANTLR, Boost, OpenCV, Eigen, Numpy, Matplotlib.

Database: SQLite, MySQL, Netezza, Vertica, Cassandra, Hive/Hadoop.

Tools: Eclipse, IntelliJ, PyCharm, Visual Studio, Git, SourceTree, Perforce, Jenkins,

Confluence, JIRA, Trello, Splunk, Chef.

Work Experience

### Software Engineer in Quality II, Intuit Inc.

12/2014 - present

• Design and implement test frameworks to facilitate automated unit and functional testing in **Big Data** projects for QuickBooks Online ecosystem. Work with developers and data scientists on project requirements to make informed testing decisions and develop/evangelize appropriate test solutions.

Recent Projects and Achievements:

- Designed and implemented a test automation framework to facilitate automated unit/functional testing of **SQL scripts**, verifying Extract-Transform-Load (**ETL**) processes between data sources (e.g., Netezza, Hive, HDFS, Vertica), and validating data consistency and integrity.
- Achievements: Multiple successful releases of datamart use cases, approved and used by business analysts and data scientists. Two Intuit Spotlight Awards for demonstrating "Learn Fast" and "Deliver Awesome".

#### Software QA Engineer, Objectivity Inc.

7/2012 - 12/2014

- Designed and implemented frameworks for automated performance testing for company's database products, Objectivity and InfiniteGraph. Developed and maintained automated regression tests for the two database products and their command-line utility tools.
- Reviewed Java codes and enforced good practices for more robust and flexible Java API.

Selected Projects and Achievements:

- Designed and implemented test plans for measuring data ingestion performance of graph database InfiniteGraph in distributed multi-client settings. Set up and configured a network of eight Linux and Windows hosts with OpenSSH. Fully automated performance tests using Python scripts, in which multiple Java test applications are compiled and ingest data simultaneously from multiple remote hosts.
- Designed and developed an automated test suite for testing Java byte code injection tools, including a custom Java parser (based on ANLTR) to verify correctness of decompiled byte codes after injection.

## Additional Experience

#### Graduate Student Researcher, University of California, Riverside

9/2009 - 4/2012

• Designed and implemented sensor fusion algorithms for accelerometers, gyroscopes, and cameras, with applications targeted for smartphones, VR headsets, and driverless car navigation systems. The algorithms, implemented in C++ and Matlab based on probabilistic models and statistical inference methods, are published in peer-reviewed conferences (ICRA).

#### Research Software Engineer, National University of Singapore

8/2006 - 7/2009

- Worked in driverless car projects, a collaboration effort of multiple Singaporean industrial research labs, managed by Defense Science Organization (DSO), Singapore.
- Designed, implemented and evaluated computer vision algorithms for visual sensor modules. Designed and implemented an adaptive machine learning algorithm to identify drivable road surface from stereo images, by building statistical models of road appearance.

#### Education

Master of Science, 2009 - 2012, University of California, Riverside. GPA: 3.92/4

Bachelor of Engineering, 2002 - 2006, National University of Singapore, Singapore. GPA: 4.42/5

# Honors & Awards

- Intuit Spotlight Award [August 2015]: for demonstrating Intuit Value "Deliver Awesome".
- Intuit Spotlight Award [March 2015]: for demonstrating Intuit Value "Learn Fast".
- IEEE ICRA Student Travel Award [2011, 2012], by IEEE Robotics and Automation Society.
- Dean's Distinguished Fellowship [2009], by University of California, Riverside.
- Singapore Scholarship, by Singapore Ministry of Foreign Affairs [2002-06], full tuition scholarship for undergraduate study, awarded to the top students of ASEAN countries.
- Dean's List, Faculty of Engineering, National University of Singapore [2002-04].