# Shiyu Dong

# PERSONAL INFORMATION

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# **OBJECTIVE**

Seeking for a full-time Software Development Engineer position starting immediately.

## **WORK EXPERIENCE**

# Qualcomm Incorporated, Software Engineer

JULY 2014 - Present

- Work in Android Radio Interface Layer (RIL) team, which handles the communication between Android Telephony and Qualcomm modem.
- Responsible for RIL Network Access Service development tasks using C/C++.
- Lead Android Enhancement Multimedia Broadcast Multicast Service development tasks for RIL using C.
- Lead Android Access Terminal Command Forward (ATFwd) App and ATFwd Daemon development tasks using Java and C.
- Develop and maintain a RIL Unit Test Framework (UTF) in C++.
- Design and implement a Python based auto triage tool that can analyze and annotate RIL logs, decode hex messages in log and generate log summaries and call flow diagrams.

### **Qualcomm Incorporated**, Software Engineer Intern

Jun 2013 - Aug 2013

- Refined UTF logging and implemented a log parser and HTML generator for UTF logs using Perl and Python.
- Optimized UTF framework to make it scalable to large number of test cases and able to take command line arguments.
- Designed a Python based auto test case generation tool that can convert RIL logs into executable UTF test
  cases

## The University of Texas at Austin, Teaching Assistant

JAN 2013 - MAY 2014

- Teaching Assistant for *Requirement Engineering* class taught by Dr. Suzanne Barber (2013) and Dr. Yinle Zhou (2014)
- Gained familiarity in the process of defining, documenting and maintaining software requirements, and different software development life cycle models including traditional waterfall model and agile model.

### **EDUCATION**

#### The University of Texas at Austin

AUG 2012 - MAY 2014

- M.S.E., Electrical and Computer Engineering | GPA: 3.82/4.0
- Thesis: "An Empirical Study of the Influence of Compiler Optimizations on Symbolic Execution" supervised by Dr. Sarfraz Khurshid.
- Corresponding research paper "Studying the Influence of Standard Compiler Optimizations on Symbolic Execution" accepted and to appear on the 26th *IEEE International Symposium on Software Reliability Engineering* (ISSRE) 2015.

#### Shanghai Jiao Tong University, Shanghai, China

SEP 2008 - AUG 2012

- B.S., Electrical and Computer Engineering | GPA: 3.73/4.0
- Thesis: "Motor Control in Endoscopic Probes Based on Infrared Signals" supervised by Dr. Jigang Wu.

# KNOWLEDGE AND SKILL SET

Solid foundation in data structures, algorithms, object oriented programming, LINUX environment programming, software testing, UNIX system, GNU tool chain and version control tools. Good understanding in operating system, computer architecture, compiler (both front end and back end), software engineering concept and requirement engineering concept. Basic understanding in computer networks.

#### PROGRAMMING LANGUAGES

Fluent: C++, C

Intermediate Knowledge: JAVA, PYTHON, SHELL SCRIPT, MATLAB, LATEX

Basic Knowledge: PERL, HTML, JAVA-SCRIPT, JUNIT, VHDL, ALLOY, ASSEMBLY