### Education

2006–2010 Master in Computer Science, *University of Houston*, Houston, *3.4*. 2002–2006 Bachelor in Electronics Engineering, *Tsinghua University*, Beijing, *3.5*.

## Master thesis

title Multi Channel Multi Radio MAC For Wireless Mesh Network

supervisors Dr. Rong Zheng

description A wireless mesh network in which each node is able to dynamically switch channels

on two radio interfaces

# Experience

#### Vocational

2013-present **Senior Software Engineer**, Samsung Telecommunication America, San Jose, CA. B2B Mobile Solution

- DM-VERITY
  - Implement dm-verity for latest Samsung Android phones with TIMA (TrustZone-based Integrity Measurement Architecture) support
- MDM partner solution integration
  - Support third party VPN/MDM solution vendors
  - Determine best integration strategy with partners
  - Educate partners on the use of Samsung MDM SDK
  - Develop new SDK APIs for partners if necessary
- MDM Gateway Server Prototyping
  - Openfire XMPP solution
  - REST API prototyping on tomcat
  - Template driven prototyping engine for authentication & control protocols
- FIPS module integration on Android
  - Linux crypto module development
  - Android crypto framework extension
  - Samsung KNOX framework development
- Cloud MDM server development
  - prototype MDM(Mobile Device Management) server architecture using XMPP
    - Openfire
    - Smack
    - $\cdot \ \, \text{Advanced authentication during TLS/SSL handshake}$

2012–2013 **Senior Software Engineer**, Samsung Telecommunication America, Dallas, TX. Android FOTA Development

- New Android FOTA feature development
- FOTA algorithm improvement
  - Patent pending
- Mobile Framework Development
  - Samsung enhancement for Android
  - Samsung Tizen framework
- Support Samsung FOTA solution commercialization on Android
  - Porting for different chipsets
  - Design and development of testing framework

2010-2012 **Software Developer**, *WorldLink*, *Inc*, Dallas, TX. Android FOTA Development

- Similar to above
  - Work as consultant

#### Miscellaneous

2006–2009 **Research Assistant**, *University of Houston*, Houston, TX. research assistant in wiser group

- Embedded Linux driver development
  - WIFI driver which operates on two wifi interfaces
- Wireless Testbed deployment
  - Python control framework
- Wireless sensor development
  - TinyOS 2.x
- Algorithm prototyping
  - optimization algorithm implementation in matlab
- Network simulation
  - NS2
  - QUALNET
- IT support
  - Linux server admin
  - Source control management
  - CMS solution using Drupal

## Languages

Python **Expert** 

C Expert

Java **Professional** 

Lua Intermediate

# Computer skills

Linux Kernel Driver developer. General understanding of Linux kernel internals

ARM chipset ARM instruction set, SafeZone, Mobile bootloaders, ARM compiling tools

Network Optimization for mobile networks protocol

Development emacs, eclipse, git, p4, gcc, cmake, tcpdump, kismet tools