

**EDUCATION** *Bachelor of Engineer, Computer Science* (expected) July 2013  
ACM Teaching Reform Class, Shanghai Jiao Tong University  
**Original GPA: 89.38/100 Rank: 2/30 GPA: 3.82/4**

**PROJECTS** I am a hacker who makes useful tools and web things in C, C++, Java, Lua and PHP with *10+ projects hosted on GitHub(@furtherLee)*. Details in the **project list**.

*HP SMC(Seamless Mobile Connectivity) Project* July 2012 ~ Now  
During my internship in HP Labs China, I am working on HP SMC project to bring a cellular-network-like end-user experience to Wi-Fi authentication and roaming. My contributions include:

- **3 papers** and **3 patents** cooperated with my supervisor Yongqiang Liu;
- A **Qt4** wireless management client on Linux with auto AP discovery and selection utility;
- A suite of stress test tools written in C and Lua for Hotspot2.0 enabled HP APs;
- A wireless management client with EPA-SIM authentication on **android**.

*Tiger(Course Project)* Spring 2011

A compiler for language Tiger written in Java. **Code: 15,000 Lines**

- Used quadruple as intermediate representation, linear scan algorithm for register allocation.
- Applied optimization including DAG, loop unrolling and peekhole etc. making a 8-queen program running on spim for only 24,000 instructions.

*TeNet(Course Project)* Fall 2011

A mini IP/TCP protocol stack running on a simulator written in Java.

- I implemented ARP, L2 Switch, IP, TCP and DV for dynamic routing, **all in 1 month**;
- I was the only one who finished all tasks with a score of 100(**ranked 1 out of 30**).

*Paik Website* Spring 2012

A website written in PHP, HTML5 and JS, finished in 2 days, providing fast job assignment service.

- Assigned jobs to peers using Hungarian algorithm or handwork for managers.
- Made job assignment only a **one-click work** from a 1-hour struggle in a group of 78 members.

**PUBLICATION**

- Yongqiang Liu, **Shijian Li**, Junqing Xie: *u-Shield: A Defense Mechanism to Prevent AP from I/O Blocking Attack with IEEE802.11u*. WoWMoM 2013(submitted)
- Yongqiang Liu, Xunteng Xu, Junqing Xie, Qunyang Lin, **Shijian Li**, Ran-Fun Chiu, Paul Congdon, Stephane Laroche, Rob Fowler, and Kyu-Han Kim: *Hotspot2.0: a Seamless Roaming Enhancement for HPN MSM Wi-Fi Systems*. HP TechCon'13(submitted)
- Yongqiang Liu, Xunteng Xu, **Shijian Li**, Junqing Xie, Qunyang Lin: *An Intelligent and Robust Extension to Hotspot2.0 Client*, HP TechCon'13(submitted)

**PATENT**

- A Solution to Prevent an I/O Blocking Attack to AP with IEEE802.11u (to be filed)
- A Solution to Protect Memory Attack to AP with IEEE802.11u (to be filed)
- A Solution to Bogus GAS Response Attack with IEEE802.11u (submitted)

**COMPUTER SKILLS** **C, C++ and Java Master** PHP, JS, LUA Amateur Tex Enthusiast  
Linux and System Hacker Software Architecture Zealot Agile Developer

**TEACHING ASSISTANT for ACM Class**

- *Project Workshop of Compiler Principles* Spring 2012  
*We designed a new language like a mixture of C and Java for our sophomores to implement.*
- *Set Theory and Mathematical Logic* Fall 2011
- *Principle and Practice of Computer Algorithms* Summer 2011

**EXTRA-CURRICULAR ACTIVITIES**

- Activist in iTuring Community – Translating IT books and articles into Chinese
- Cofounder of AngularJS Chinese Community(angularjs.cn) – Unofficial community to learn and develop AngularJS based web applications
- Volunteer of Expo 2010 Shanghai – Star of Volunteers