Chang Lou

Curriculum Vitæ

800 Dongchuan Road, Shanghai, China
+86 188 1821 3994
louchang _ new@163.com
http://wizardbookforalan.appspot.com

Research Experience

Oct 2015 – Jal 2016

rDSN: an open framework for distributed systems

Microsoft Research Asia

Advisor: Zhenyu Guo
Contributed to Robust Distributed System Nucleus (rDSN), an open framework for quickly building and managing high performance and robust distributed systems.

July 2015 – Sept 2015

Enabling Valgrind on User-mode Linux

Columbia University Software Systems Lab

Advisor: Junfeng Yang
Focused on enabling Helgrind, a powerful thread debugger in Valgrind tool suite which finds data races in multithreaded programs using (POSIX p-)threads, to detect kernel races.

April 2014 – July 2015

Coverage and Data Engineering in the Next Generation Wireless Network (4G)

Shanghai Jiao Tong University Advanced Network Lab

Advisor: Xiaofeng Gao
Put forward a novel scheme for wireless sensor networks turning the energy cost issue into an integer linear programming problem and made accurate estimation to optimize the network energy consumption. The paper was accepted by **WASA 2015**.

Project Experience

Sept 2014 – Dec 2014

FreeFLY: An Automatic Control System on Quadcopter

Designed and implemented a system on host machine to automatic controlling quadcopter. Features includes multiple controlling mode (environment tracking, human movement tracking, laser pointer controlling), low latency and self-correction.

Education

2012 – 2016 **B.S., Computer Science**
GPA: 3.65/4.0
Shanghai Jiao Tong University

Publications

Energy-Aware Clustering and Routing Scheme in Wireless Sensor Network

Chang Lou, Xiaofeng Gao, Fan Wu, Guihai Chen
The 10th International Conference on Wireless Algorithms, Systems, and Applications

Patents (Pending)

Beautifying Algorithm on QR Code

Chang Lou, Siyuan Qiao, Weichen Li

Awards

2015 **The Meritorious Winner**
Mathematical Contest in Modeling (United States)

2014 **The Second Prize**
National Mathematical Contest in Modeling (China)

2014 **Shanghai Jiao Tong University Scholarship**
Shanghai Jiao Tong University

Project Experience (Cont.)

Sept 2014 – Dec 2014

MusCode: An QR Code Abstraction App on Android

Collaboratively designed and implemented this app, which produces machine readable QR Code that is visually similar to the input image. Assisted one teammate to write a conference paper describing details of our algorithm, which won the **best paper award of CGI 2015**. A more industrial version of algorithm has been used to apply for **patents**.