

Qin Liu

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RESEARCH INTERESTS	Distributed System, Network Monitoring, Machine Learning, Artificial Intelligence and Algorithms.	
EDUCATION	The Chinese University of Hong Kong	2012 - Present
	<ul style="list-style-type: none">• Ph.D. Student, Department of Computer Science & Engineering• Advised by Prof. John C.S. Lui and Prof. Patrick P. C. Lee.	
	Shanghai Jiao Tong University	2008 - 2012
	<ul style="list-style-type: none">• Bachelor of Science, ACM Honored Class, Department of Computer Science & Engineering.• <i>ACM Honored Class</i> is a group of 26 top computer science students selected from entire university. The students in the ACM Honored Class are considered the BEST among all 150 students in the department.	
RESEARCH EXPERIENCE		July 2010 - June 2012
	Research Assistant at Center for Brain-like Computing and Machine Intelligence. <ul style="list-style-type: none">• Sketch-based Image Search System, advised by Prof. Liqing Zhang. We developed a sketch-based image search engine called Painting-Finder in Python.• Brain Computer Interface and EEG Data Processing, advised by Prof. Liqing Zhang. We worked on EEG noise reduction and developed pattern classification methods for imaginary motion potentials using theory and methods of statistical learning and information geometry, such as PCA, ICA and SVM.	
		July 2011 - Feb 2012
	Research Intern at Tencent Inc. <ul style="list-style-type: none">• Cloud-based Malware Detection System, advised by Prof. John C.S. Lui. We analyzed different kinds of malwares collected from the cloud-based anti-virus engine using IDA Pro, OllyDbg, PEid etc. We worked on the development of a static and dynamic software analysis platform to accelerate the process of malware analysis.	
PUBLICATIONS	“SAND: A Fault-Tolerant Streaming Architecture for Network Traffic Analytics” by Qin Liu, John C.S. Lui, Cheng He, Lujia Pan, Wei Fan, Yunlong Shi. In the 44th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2014) (Practical experience report). 2014.	
	“Combining Factorization Model and Additive Forest for Collaborative Followee Recommendation” by Tianqi Chen, Linpeng Tang, Qin Liu, Diyi Yang, Saining Xie, Xuezhi Cao, Chunyang Wu, Enpeng Yao, Zhengyang Liu, Zhansheng Jiang, Cheng Chen, Weihao Kong, Yong Yu. In KDD Cup 2012 Workshop. 2012.	
AWARDS & HONORS	1st place in KDD Cup 2012, Track 1 (Team ACMClass@SJTU)	2012
	Silver Medal (38th place) in National Olympiad in Informatics , China	2007
	Academic Excellence Scholarship (2nd-prize), SJTU	2011
TEACHING EXPERIENCE	Teaching Assistant of <i>Data Communication and Computer Networks</i> , CUHK	Fall 2012
	Teaching Assistant of <i>Introduction to Operating Systems</i> , CUHK	Fall 2012
	Teaching Assistant of <i>Machine Learning and Data Mining in Practice</i> , SJTU	Spring 2012
	Teaching Assistant of <i>Project Workshop of Operating System</i> , SJTU	Fall 2011
	Teaching Assistant of <i>Project Workshop of Compiler Principles</i> , SJTU	Spring 2011

Teaching Fellow of <i>Programming</i> , SJTU	Fall 2010
Teaching Assistant of <i>Principle and Practice of Computer Algorithms</i> , SJTU	Summer 2010
Teaching Assistant of <i>Data Structure</i> , SJTU	Spring 2010
Teaching Assistant of <i>Programming</i> , SJTU	Fall 2009

SELECTED PROJECTS

KDD Cup 2012, Track1 (Team ACMClass@SJTU, with Tianqi Chen, Linpeng Tang et al.)

- The task was predicting which users (or information sources) one user might follow in Tencent Weibo.
- Our team won the 1st place in the track 1 of KDD Cup 2012 with the \$5000 cash prize and was invited to the ACM SIGKDD 2012.

Artificial Intelligent Go player (with Linpeng Tang et al.)

Spring 2011

- The project was based on the course *Artificial Intelligence* advised by Prof. Liqing Zhang.
- The goal is implementing an computer player for the game of Go and our approach was based on Monte-Carlo tree search.
- Our project was ranked 1st among 12 groups and the project homepage is <http://code.google.com/p/iao-gim-ca/>.

Fatworm (with Linpeng Tang et al.)

Spring 2011

- The project was based on the course *Project Workshop on Database System Concepts* and the goal is implementing a Database Management System supporting millions of records, SQL with subquery, transactions, multi-user concurrent at a time, JDBC and remote access.
- Our project was scored 97, ranked 1st among 8 groups.

Tiger Compiler

Spring 2010

- The project was based on the course *Project Workshop of Compiler Principles* and it is a compiler for the programming language *Tiger*.
- Implemented all the phases of a complete compiler, starting from lexer and the target is MIPS instructions which can run on SPIM.
- My project was scored 97, ranked 3rd among 26 students and the project homepage is <http://code.google.com/p/lqhl-acm-tiger/>.

COMPUTER SKILLS

Programming Languages: C/C++, Java, L^AT_EX, Python, Delphi, Matlab, SQL.