Ken LING

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RESEARCH INTEREST

Multimedia Network, Cloud Computing, Software-Defined Network, Network Systems

EDUCATION

JULY 2015 (Expected) Bachelor of Engineering in COMPUTER SCIENCE, **Tsinghua University**
OVERALL GPA: 90/100 MAJOR GPA: 90/100 RANKING: 18/124

Theory of Computer Network	90	Computer Organization	90
Programming and Training	94	Software Engineering	93
Numerical Analysis	95	Linear Algebra (1)/(2)	90/97

SCHOLARSHIPS AND HONORS

2014 Tsinghua - Evergrande Group Scholarship (top 5% merit in cohort)
2014 Winning the 3rd in 200 meters breaststroke in Tsinghua University
2013 Tsinghua - Zheng Geru Scholarship
2012 Tsinghua - Suzhou Industrial Park Scholarship (top 5% merit in cohort)
2011 Excellent High School Graduate of Beijing

RESEARCH EXPERIENCE

Current – MAY 2014
Enhance User Experience of Online Services in Home Network
Supervised by Prof. Wenwu Zhu, Tsinghua University
- Designed a dynamic rate-allocation system over SDN-powered home smart routers
- Proposed a QoE metric combining the using frequency and using intensity of services
- Built up a simulation system with Mininet and Open Virtual Switch

JUL-AUG 2014
Strategies in User Provided Wireless Network
Supervised by Prof. Chuan Wu, the University of Hong Kong
- Presented the solvability of the problem by analyzing users' moving patterns in data sets
- Reconstructed the WiFi hotspots distribution pattern in Seoul, Korea
- Designed a greedy algorithm to effectively select hotspots to cover an area with minimum cost

JAN-MAR 2014
Effect of QoS control implementation on Smart Routers' Performance
Supervised by Prof. Wenwu Zhu, Tsinghua University
- Measured a HiWiFi device under various network parameters in a testbed built by myself
- Discovered a flaw in the HiWiFi device, which can damage the TCP/UDP competation balance

SELECTED COURSE PROJECTS

FALL 2013
Auditory Masking in Data Transmission
Principles of Signal Processing, Supervised by Prof. Mingxing Xu
- Coded text data by audio wave and blended it in music with little perceptual distortion
- Implemented error correcting code to enhance decoding accuracy
- Got a score of 98/100

Fall 2013 | *Trumponline, A Card Game Web Platform*
Software Engineering, Supervised by Prof. Xiaoying Bai
Mastered the MVP design pattern and finished the presenter part which controlled the web end with data from the server end
Participated in the process of software design, implementation and testing
Got a score of 93/100

Fall 2013 | *Design A 32-bit CPU with Instruction Pipeline*
Computer Organization, Supervised by Prof. Weidong Liu
Designed and implemented the CPU on THCO-MIPS instruction set with two fellows
Modified the GCC to run C++ programs on our CPU
Got a score of 90/100

Spring 2013 | *AI Design for Game, Connect Four*
Introduction to Artificial Intelligence, Supervised by Prof. Shaoping Ma
Self-learned and implemented Monte Carlo Tree Search method
Achieved a winning rate over 90%
Got a score of 97/100

Extracurricular Activities

Sep 2014 - Present	Class monitor in Computer Science Department
Sep 2012 - Jul 2013	Leader of a group in Student Research Training project in DSP course
Sep 2012 - Jul 2013	Member of arts division of the student union in Computer Science Department
Sep 2012 - Present	Member of the swimming team in Computer Science Department
Sep 2012 - Present	Member of Photography Association in Tsinghua University

Languages

Chinese:	Native
English:	GRE: Verbal 161, Quantitive 170, AW 3.0
	TOEFL: Reading 30, Listening 30, Writing, 29, Speaking, 22, Total 111

Computing Skills

Programming Languages:	C/C++, Java, Python, MATLAB, VHDL, Assembly Language
Professional Software:	Mininet, Wireshark, MySQL
Applications:	LaTeX, spreadsheet, presentation software
Operating Systems:	Linux, OS X, Windows