Shenghua He

Email: shenghh@clemson.edu
Homepage: http://heshenghua.github.io/resume/
Telephone: +864-986-5460

Research Interests

- Datacenter Network
- Cloud computing
- Distributed Computing
- Computer Network System & Architecture

Education

May 2015-Current	**Clemson University, Clemson, SC, USA** PhD. in Computer Engineering
Sept.2012-April 2015	**Beijing University of Posts & Telecommunications(BUPT), Beijing, China** MS. in Electronic and Communications Engineering GPA: 81/100
Sept.2008-June 2012	**Wuhan University of Technology(WHUT), Wuhan, China** BS. in Electronic Engineering GPA: 88/100 Rank: 4/111

Research Experience

May 2015-Current	**PhD.& RA, Dept. of Electronic and Computer Engineering, Clemson University, SC, USA** I work on the research area of cloud computing. For one hand, I try to improve the utilization of the cloud resources by designing novel resource allocation strategies in datacenter networks. Furthermore, I hope to improve the network performance by flow and congestion control.
Aug. 2013-Mar. 2015	**MS. & RA, Beijing Key Lab of Network System Architecture & Convergence, BUPT, Beijing, China** I work on the wireless resource optimization in heterogeneous wireless networks, which consists of small cell networks underlying in the macro cell network. The related research works has been already published in journals, such as **Mobile Networks & Applications** and **International Journal of Distributed Sensor Networks**, and conferences, such as **ICT 2014, VTC 2014 and WPMC 2014** (see the publications part).
May 2013-Spet. 2013	**Android R&D Intern, Beijing Novel-TV Media Technology Co., Ltd, Beijing** As an Android R&D Intern, I bore full responsibility for the R&D of the Android client of an on-line video interactive system, through which users can watch the online living video updated by Android smart terminals. I put the

fundamental knowledge of computer networks into practice, and practice my Java programming skills.

Spet.2012-May 2013 **MS. & RA, Beijing Key Lab of Network System Architecture & Convergence, BUPT, Beijing**

As a participant in the R&D of a video conference system, which supports video conference between PC users and Android users. I was responsible for the development of the user interface for the Android client, which contains the login management and user interface design. By doing this project, my skills on Java programming in Android environment has been developed.

Publications

Journal:
1. **S. He,** Z. Lu, X. Wen, Z. Zhang, J. Zhao and W. Jing, " A Pricing Power Control Scheme with Statistical Delay QoS Provisioning in Uplink of Two-tier OFDMA Femtocell Networks", *Mobile Networks and Applications: The Journal of SPECIAL ISSUES on Mobility of Systems, Users, Data and Computing* (Impact Factor:1.5), June 2015.
2. J. Zhao, Z. Lu, X. Wen, H. Zhang, **S. He** and W. Jing, "Resource Management Based on Security Satisfaction Ratio with Fairness-Aware in Two-Way Relay Networks", ***International Journal of Distributed Sensor Networks***, Volume 2015.

Conference:
1. **S. He**, Z. Lu, X. Wen, Z. Zhang, Y. Sun and L. Zhang, "Energy-Efficient Power Allocation with QoS Guarantee in OFDMA Wireless Networks", the proc. of 17th International Symposium on Wireless Personal Multimedia Communications (**WPMC**), Sept.2014.
2. **S. He**, L. Zhang, X. Wen, Z. Zhang, Z. Lu and Y. Sun, "Price-based power control with statistical delay QoS guarantee in two-tier femtocell networks", the proc. of 21st International Conference on Telecommunications (**ICT**), May 2014.
3. L. Zhang, **S. He**, X. Wen, W. Zheng, J. Zhang and Z. Lu, "Network MIMO with decision tree classification in downlink OFDMA networks", the proc. of 21st International Conference on Telecommunications (**ICT**), May 2014.
4. Z. Zhang, X. Wen, Z. Li, **S. He**, W. Jing and J. Zhao, "QoS-aware energy-efficient power control in two-tier femtocell networks based on Q-learning", the proc. of 21st International Conference on Telecommunications (**ICT**), May 2014.
5. L. Zhang, X. Wen, T. Xu, Z. Lu, J. Zhao, **S. He**, "Coordinated Scheduling in Downlink Multi-Cell OFDMA Networks", the proc. of 2014 IEEE 80th Vehicular Technology Conference (**VTC Fall**), Sept.2014.

Talks

- "Price-based power control with statistical delay QoS guarantee in two-tier femtocell networks", Lecture at ICT 2014, Lisbon Institute of University, Lisbon, Portugal

Awards

May 2015	**Graduate Research Assistantship, Clemson University**
Oct. 2014	**Graduate National Scholarship, China (3%)**
Sept. 2013-June 2014	Third Scholarship, BUPT, Beijing, China
Sept. 2012-Sept. 2013	Second Scholarship, BUPT, Beijing, China
Sept. 2011-June 2012	Outstanding Graduate Award, WHUT, Wuhan, China (10%)
Sept. 2010-Sept. 2011	National Scholarship of Encouragement, Ministry of Education, China (5%) Excellent Student Work Award, WHUT, Wuhan, China (5%)
Sept. 2009-Sept.2010	National Scholarship of Encouragement, Ministry of Education, China (5%) Excellent Student Work Award, SIE, WHUT, Wuhan (10%)
Sept. 2009-Sept.2010	National Scholarship of Encouragement, Ministry of Education, China (5%) 3-A student Award, WHUT, Wuhan, China (5%) 3rd prize in Mathematics Competition, WHUT, Wuhan (20%)

Skills

- Programming Languages: Java, C/C++, Matlab
- Development Tools: Eclipse, Visual Studio, Matlab
- Data Analysis: Origin
- Development Environment: Android

Professional Activities

Journal Reviews:	Mobile Networks & Applications
Conference Reviews:	ICC 2015 ICT 2014

English Proficiency

GRE: 312	Quantitative: 164; Verbal: 148; Analytical Writing: 3
TOEFL: 83	Reading: 26; Listening: 18; Speaking: 18; Writing: 21

Hobbies

- basketball, badminton, running, hiking