Long Gong

266 Ferst Dr, Atlanta, GA 30332, United States Cell: +1(404)697-0608. Email: gonglong@gatech.edu

OBJECTIVE

Internship position in the field of networking (with special interest in software defined networking and data center networking), data science and software engineering.

Available: May - Aug 2016

EDUCATION

Georgia Institute of Technology, Atlanta, GA, USA

Ph.D. Candidate in Computer Science (GPA: 4.0/4.0)

2015.8 - 2020.5

• Research Area: Data Streaming, Network Algorithmics for Software Defined Networking

University of Science and Technology of China (USTC), Hefei, Anhui, China

M. E. in Communication and Information Systems (GPA: 3.81/4.3)

2012.9 - 2015.6

• Research Area: Network Virtualization, Elastic Optical Network

B. E. in Electronic Information Engineering (GPA: 3.75/4.3)

2008.9 - 2012.6

PROJECT EXPERIENCE

Networking and Telecommunication Group, Georgia Tech., USA, 2015.8 - Present

Graduate Research Assistant

Advisor: Prof. Jim Xu

• Designed a novel measurement algorithm which combined sampling and streaming techniques to capture the major statistical properties of online social networking graphs. It improved the accuracy up to one magnitude.

Intelligent Networking Systems & Future Internet Infrastructure Lab, USTC, China, 2011.9 - 2015.6

Research Assistant Advisor: Prof. Zuqing Zhu

- Designed efficient virtual optical network embedding algorithms, evaluated their performance with well-defined simulations. (ICC 2013, GLOBECOM 2013, and etc)
- Designed and built a software defined networking (SDN) based network virtualization controlplane platform, which provided APIs for plugging in various virtual network embedding algorithms to evaluate their performance and GUI for users to conveniently setup and manage the virtual networks. (Master Thesis)

Cloud Application and Platform Group, NanYang Technological University, Singapore, 2012.2 - 2012.6

Visiting Undergraduate Researcher

Advisor: Prof. Yonggang Wen

• Designed a novel virtual network embedding algorithm, which increased the network utilization and decreased the time complexity. (INFOCOM 2014)

SELECTED PUBLICATIONS

- 1. Long Gong, and Zuqing Zhu, "Virtual Optical Network Embedding (VONE) over Elastic Optical Networks," IEEE/OSA Journal of Lightwave Technology, vol. 32, no. 3, pp. 450-460, Feb. 2014.
- 2. Long Gong, Yonggang Wen, Zuqing Zhu, and Tony Lee, "Toward Profit-Seeking Virtual Network Embedding Algorithm via Global Resource Capacity," in Proceedings of IEEE International Conference on Computer Communications (INFOCOM), pp. 1-9, Apr. 2014.
- 3. Long Gong, Yonggang Wen, Zuqing Zhu, and Tony Lee, "Revenue-driven Virtual Network Embedding Based on Global Resource Information", in Proceedings of IEEE Global Communications Conference (GLOBECOM), pp. 1-6, Dec. 2013.

- 4. Long Gong, Xiang Zhou, Xiahe Liu, Wenwen Zhao, Wei Lu and Zuqing Zhu, "Efficient Resource Allocation for All-Optical Multicasting over Spectrum-Sliced Elastic Optical Networks", IEEE/OSA Journal of Optical Communications and Networking, vol. 5, no. 8, pp. 836-847, Aug. 2013.
- 5. **Long Gong**, Wenwen Zhao, Yonggang Wen and Zuqing Zhu, "Dynamic Transparent Virtual Network Embedding over Elastic Optical Infrastructures", in Proceedings of IEEE International Conference on Communications (ICC), pp. 1-6, Jun., 2013.
- 6. Long Gong, Xiang Zhou, Wei Lu and Zuqing Zhu, "A Two-Population Based Evolutionary Approach for Optimizing Routing, Modulation and Spectrum Assignments (RMSA) in O-OFDM Networks", IEEE Communications Letters, vol. 16, no. 9, pp. 1520-1523, Sept. 2012.

Honors and Awards

| Best Paper Award | |
|--|-------------|
| ONS Symposium, IEEE ICC 2013 | 2013 |
| ONS Symposium, IEEE GLOBECOM 2013 | 2013 |
| Excellent Graduate | |
| University of Science and Technology of China, Hefei, Anhui, China | 2015 |
| National Scholarship (for Master Students) | |
| University of Science and Technology of China, Hefei, Anhui, China | 2013 |
| Outstanding Student Scholarship | |
| University of Science and Technology of China, Hefei, Anhui, China | 2008 - 2010 |
| Lin Boqu Scholarship | |
| No.1 Middle School of Changde, Changde, Hunan, China | 2008 |
| Third Prize in National High School Physics Olympiad | |
| National High School Physics Olympiad in 2008 | 2008 |
| First Prize in High School Chemistry Olympiad in Hunan | |
| High School Chemistry Olympiad in Hunan in 2008 | 2008 |

PROFESSIONAL SKILLS

Programming: C++, PYTHON, MATLAB, LATEX, PHP, JAVASCRIPT

Networking Tools: Mininet, POX, OpenFlow.

Presentations

- 1. IEEE International Conference on Computer Communications (INFOCOM) 2014, Toronto, Canada
- 2. IEEE Global Communications Conference (GLOBECOM) 2013, Atlanta, USA
- 3. IEEE International Conference on Communications (ICC) 2013, Budapest, Hungary

Professional Service

Paper reviewer for (selected)

- 1. IEEE Transactions on Communications
- 2. IEEE Transactions on Parallel and Distributed Systems
- 3. IEEE Communications Letters