

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), scheduling in switches, and software engineering. Available: Summer 2019

Education

Georgia Institute of Technology, Atlanta, GA, USA

Ph.D. Candidate in Computer Science (GPA: 3.91/4.0)

2015.8 - 2019.5 (**Expected**)

University of Science and Technology of China, Hefei, Anhui, China

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

2012.9 - 2015.6

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

2008.9 - 2012.6

Intern Experience

Alibaba Group (U.S.) Inc., Bellevue, WA, USA

Intern

2018.5 - 2018.8

Mentor: Gang Cheng

Built

a

AT&T Labs Research, Bedminster, NJ, USA

Research Intern

2016.5 - 2016.7

Mentor: He Yan and Zihui Ge

Developed tools to automate the dynamics analysis in services supported by virtualized environment.

Projects

Crossbar Scheduling

2016.2 - Present

- Designed a suite of simple distributed/parallel crossbar scheduling algorithms, which can exactly or approximately emulate the linear-time centralized version (*i.e.*, SERENA) in logarithmic rounds with almost the same delay performance.

- Designed a simple yet effective “add-on” crossbar scheduling algorithm for input-queued switches, which can boost the performance (switch throughput or delay or both) of existing crossbar scheduling algorithms (*e.g.*, iSLIP and SERENA) with almost “no” computational overhead. (SIGMETRICS 2017)

- Built an efficient and flexible simulator for crossbar scheduling in input-queued switches.

Time Capsule for Online Social Activities

2015.9 - Present

- Designed a hybrid streaming-sampling algorithm for high accurate measurements of Online Social Networking (OSN) cascade statistics, using limited memory, which decreased the errors (measured in ℓ_2) by more than one order of magnitude. (ICCCN 2017)

Network Virtualization over Elastic Optical Networks

2012.2 - 2015.6

- Proved the first inapproximability result of the location-constrained virtual network embedding (LC-VNE) problems, and designed efficient algorithms for solving LC-VNE, which achieved much better performance (in terms of both resource consumption and fairness). (IEEE/ACM Transactions on Networking)

- Built the first OpenFlow-based network virtualization platform where the underlying infrastructure is the flexible-grid elastic optical networks. (Master Thesis)

Professional Skills

Programming Languages: C++ (proficient), PYTHON (fluent), JAVA (prior experience)

Professional Service

Reviewer (selected): IEEE INFOCOM 2016, IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS, IEEE/ACM TRANSACTIONS ON NETWORKING