

# Li Chen

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AFFILIATION	Edward S. Rogers Sr. Department of Electrical and Computer Engineering University of Toronto 10 King's College Road Toronto, Ontario M5S 3G4, Canada	<i>Email:</i> lchen@ece.utoronto.ca <i>Web:</i> iqua.ece.toronto.edu/lchen  <i>Mobile:</i> (647) 994-6868
PERSONAL INFORMATION	<i>Citizenship</i> Chinese <i>Gender</i> Female	
EDUCATION	<b>University of Toronto</b> , Toronto, Canada <i>Department of Electrical and Computer Engineering</i>  ◇ <b>Ph.D.</b> , Electrical and Computer Engineering, July 2018 (Expected) ▷ <i>Dissertation:</i> "Optimizing Data Analytic Jobs with Fairness Constraints in Datacenter Networks" ▷ <i>Advisor:</i> Baochun Li, Department of Electrical and Computer Engineering  ◇ <b>M.A.Sc.</b> , Electrical and Computer Engineering, January 2015 ▷ <i>Dissertation:</i> "Performance-Centric Bandwidth Allocation for Data Parallel Applications in Private Datacenters" ▷ <i>Advisor:</i> Baochun Li, Department of Electrical and Computer Engineering  <b>Huazhong University of Science and Technology</b> , Wuhan, People's Republic of China <i>Department of Computer Science and Technology</i>  ◇ <b>B.Engr.</b> , Computer Science and Technology, July 2012	
RESEARCH INTERESTS	Big data analytics systems, optimization for machine learning frameworks, datacenter networking, network optimization, cloud computing, resource allocation, design and optimization for distributed systems.	
HONOURS AND AWARDS	◇ Best-in-Session Presentation, the IEEE International Conference on Computer Communications (INFOCOM 2016) ▷ For presenting the paper co-authored with Wei Cui, Baochun Li and Bo Li, titled "Optimizing Coflow Completion Times with Utility Max-Min Fairness", April, 2016.  ◇ Best Paper Candidate, the IEEE International Conference on Cloud Engineering (IC2E 2016) ▷ For the paper co-authored with Baochun Li and Bo Li, titled "Barrier-Aware Max-Min Fair Bandwidth Sharing and Path Selection in Datacenter Networks", April, 2016.  ◇ ECE Fellowship, University of Toronto, 2012 to present.  ◇ National Scholarship ( <i>top 2%, highest scholarship in China</i> ), 2009 - 2010.	

- ◇ Student Award of Merit (Top 5%), Huazhong University of Science and Technology, 2010.
- ◇ Excellent Academic Performance Scholarship (*top 10%*), 2008 - 2009, 2009 - 2010.
- ◇ 2nd prize in the 14th Foreign Language Teaching and Research Cup English Debating Contest, 2009

RESEARCH  
EXPERIENCE

**Research Assistant**

*University of Toronto*, Toronto

Sept. 2014 - Present, Sept. 2012 - Jul. 2013

**Visiting Research Assistant**

*The Hong Kong Polytechnic University*, Hong Kong

Sept. 2013 - Jul. 2014

**Undergraduate Research Assistant**

*Huazhong University of Science and Technology*, Wuhan

Aug. 2011 - Jul. 2012

TEACHING  
EXPERIENCE

**Teaching Assistant**

*University of Toronto*, Toronto

Jan. 2013 - Present

▷ ECE297: Communication and Design,

*Winter 2013*

▷ APS105: Computer Fundamentals,

*Fall 2014, Fall 2015*

▷ ECE353: Systems Software,

*Winter 2015, Winter 2016, Winter 2017, Winter 2018*

▷ ECE1771: Quality of Service (graduate course),

*Fall 2016*

▷ ECE244: Programming Fundamentals.

*Fall 2017*

PUBLICATIONS

◇ **Journal Articles**

[J1] [A\*] Li Chen, Yuan Feng, Baochun Li, Bo Li. "Efficient Performance-Centric Bandwidth Allocation with Fairness Tradeoff," in *IEEE Transactions on Parallel and Distributed Systems*, 2018.

[J2] Li Chen, Shuhao Liu, Baochun Li, Bo Li. "Scheduling Jobs across Geo-Distributed Datacenters with Max-Min Fairness," in *IEEE Transactions on Network Science and Engineering*, 2018.

[J3] Li Chen, Baochun Li, Bo Li. "Allocating Bandwidth in Datacenter Networks: A Survey," in *Journal of Computer Science and Technology*, Springer, vol. 29, no. 5, pp. 910-917, September 2014.

[J4] Li Chen, Baochun Li, Bo Li. "On Meeting Deadlines in Datacenter Networks," in *Tsinghua Science and Technology*, vol. 18, no. 3, pp. 273-285, June 2013.

◇ **Conference Papers**

[C1] [A\*] Shuhao Liu, Li Chen, Baochun Li, Aiden Carnegie. "A Hierarchical Synchronous Parallel Model for Wide-Area Graph Analytics," in the Proceedings of *IEEE INFOCOM 2018*, Honolulu, HI, April 15-19, 2018 (acceptance ratio: 19%).

[C2] Shuhao Liu, Li Chen, Baochun Li. "Siphon: A High-Performance Substrate for Inter-

Datacenter Transfers in Wide-Area Data Analytics,” in the Proceedings of *ACM Symposium on Cloud Computing (SoCC 2017)*, Poster Session, Santa Clara, California, September 25-27, 2017. (Patent application filed in February, 2017. Full version has been submitted to *USENIX ATC 2018*.)

[C3] [A\*] Li Chen, Shuhao Liu, Baochun Li, Bo Li. “Scheduling Jobs across Geo-Distributed Datacenters with Max-Min Fairness,” in the Proceedings of *IEEE INFOCOM 2017*, Atlanta, Georgia, May 1-4, 2017 (acceptance ratio: 20%). (Patent application filed in December, 2016)

[C4] [A\*] Li Chen, Wei Cui, Baochun Li, Bo Li. “Optimizing Coflow Completion Times with Utility Max-Min Fairness,” in the Proceedings of *IEEE INFOCOM 2016*, San Francisco, California, April 10-15, 2016 (acceptance ratio: 18%).

[C5] Li Chen, Baochun Li, Bo Li. “Barrier-Aware Max-Min Fair Bandwidth Sharing and Path Selection in Datacenter Networks,” in the Proceedings of the 4th IEEE International Conference on Cloud Engineering (IC2E 2016), Berlin, Germany, April 4-8, 2016 (acceptance ratio: 23%) (Best Paper Candidate).

[C6] Li Chen, Baochun Li, Bo Li. “Surviving Failures with Performance-Centric Bandwidth Allocation in Private Datacenters,” in the Proceedings of the 4th IEEE International Conference on Cloud Engineering (IC2E 2016), Berlin, Germany, April 4-8, 2016 (acceptance ratio: 23%).

[C7] [A\*] Li Chen, Yuan Feng, Baochun Li, Bo Li. “Towards Performance-Centric Fairness in Datacenter Networks,” in the Proceedings of *IEEE INFOCOM 2014*, Toronto, Canada, April 27 – May 2, 2014 (acceptance ratio: 19%).

PROFESSIONAL  
SERVICES

- ◇ Conference Volunteer: IEEE INFOCOM 2014
- ◇ Reviewer for Journal Manuscript Submissions: IEEE Transactions on Networking, IEEE Transactions on Mobile Computing, Multimedia Systems Springer Journals
- ◇ Reviewer for Conference Manuscript Submissions: ACM Multimedia, ACM MMSys, ACM NOSSDAV, IEEE INFOCOM, IEEE IWQoS, IEEE SECON, IEEE MASS, IEEE GLOBECOM, IEEE ICC, IEEE IC2E, WiOpt

REFERENCES

**Baochun Li**, IEEE Fellow, Professor  
Bell Canada Endowed Chair in Computer Engineering  
Department of Electrical and Computer Engineering  
University of Toronto  
10 Kings College Road, Toronto, Ontario M5S 3G4, Canada  
Phone: +1-416-946-7338; Fax: +1-416-978-4425  
Email: bli@ece.toronto.edu  
Web: (<http://iqua.ece.toronto.edu/bli/>)

**Bo Li**, IEEE Fellow, Professor  
Department of Computer Science and Engineering  
The Hong Kong University of Science and Technology  
Clear Water Bay, Kowloon, Hong Kong, China

Phone: +852-2358-6976; Fax: +852-2358-1477  
Email: bli@cse.ust.hk  
Web: (<https://www.cse.ust.hk/~bli/>)

**Jiannong Cao**, IEEE Fellow, Professor  
Department of Computing  
The Hong Kong Polytechnic University  
Hung Hom, Kowloon, Hong Kong, China  
Phone: +852-2766-7275; Fax: +852-2774-0842  
Email: csjcao@comp.polyu.edu.hk  
Web: (<http://www.comp.polyu.edu.hk/~csjcao/>)

**Ben Liang**, IEEE Fellow, Professor  
Department of Electrical and Computer Engineering  
University of Toronto  
10 Kings College Road, Toronto, Ontario M5S 3G4, Canada  
Phone: +1-416-946-8614 ; Fax:+1-416-978-4425  
Email: liang@ece.utoronto.ca  
Web: (<http://www.comm.utoronto.ca/~liang>)