

Hao Wang

Contact Information

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University of Toronto
10 King's College Road,
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Education

University of Toronto

Ph.D. in Computer Engineering, Advisor: Prof. Baochun Li

Toronto, Canada

Sept. 2015 - present

Shanghai Jiao Tong University (SJTU)

M.E. in Software Engineering

Shanghai, China

Sept. 2012 - Mar. 2015

Shanghai Jiao Tong University (SJTU)

B.E. in Information Security

Shanghai, China

Sept. 2008 - Jul. 2012

Research Interest

Data Analytics, Distributed Computing, Datacenter Networking

Publications

[Conference Publications]

- **Dynamic and Decentralized Global Analytics via Machine Learning**
Hao Wang, Di Niu, Baochun Li. *ACM SoCC*, Carlsbad, CA, October 2018
- **Lube: Mitigating Bottlenecks in Wide Area Data Analytics**
Hao Wang, Baochun Li. *USENIX HotCloud*, Santa Clara, CA, July 2017
- **FlowProphet: Generic and Accurate Traffic Prediction for Data-parallel Cluster Computing**
Hao Wang, Li Chen, Kai Chen, Ziyang Li, Yiming Zhang, Haibing Guan, Zhengwei Qi, Dongsheng Li, Yanhui Geng. *IEEE ICDCS*, Columbus, OH, June 2015.
- **Guaranteeing Deadlines for Inter-Datacenter Transfers**
Hong Zhang, Kai Chen, Wei Bai, Dongsu Han, Chen Tian, Hao Wang, Haibing Guan, Ming Zhang. *ACM EuroSys*, Bordeaux, France, April 2015.
- **Practical Information-Agnostic Flow Scheduling for Data Center Networks**
Wei Bai, Li Chen, Kai Chen, Dongsu Han, Chen Tian, Hao Wang. *USENIX NSDI 2015*, Oakland, CA, May 2015.
- **Explicit Path Control in Commodity Data Centers: Design and Applications**
Shuihai Hu, Kai Chen, Haitao Wu, Wei Bai, Chang Lan, Hao Wang, Hongze Zhao, Chuanxiong Guo. *USENIX NSDI 2015*, Oakland, CA, May 2015.
- **On Pricing Schemes in Data Center Network with Game Theoretic Approach**
Hao Wang, Yangming Zhao, Haibing Guan. *IEEE ICCCN 2014*, Shanghai, China, August 2014.

[Journal Publications]

- **Mitigating Bottlenecks in Wide Area Data Analytics via Machine Learning**
Hao Wang, Baochun Li. *IEEE Transactions on Network Science and Engineering (TNSE)*, 2018.
- **Information-Agnostic Flow Scheduling for Commodity Data Centers**
Wei Bai, Li Chen, Kai Chen, Dongsu Han, Chen Tian, Hao Wang. *IEEE/ACM Transactions on Networking (ToN)*, 2017.
- **Guaranteeing Deadlines for Inter-Datacenter Transfers**
Hong Zhang, Kai Chen, Wei Bai, Dongsu Han, Chen Tian, Hao Wang, Haibing Guan, Ming Zhang. *IEEE/ACM Transactions on Networking (ToN)*, 2016.
- **Explicit Path Control in Commodity Data Centers: Design and Applications**
Shuihai Hu, Kai Chen, Haitao Wu, Wei Bai, Chang Lan, Hao Wang, Hongze Zhao, Chuanxiong Guo. *IEEE/ACM Transactions on Networking (ToN)*, 2015.
- **Towards Comprehensive Traffic Forecasting in Cloud Computing: Design and Application**

Yang Peng, Kai Chen, Guohui Wang, Wei Bai, Yangming Zhao, **Hao Wang**, Yanhui Geng, Zhiqiang Ma, Lin Gu. IEEE/ACM Transactions on Networking (ToN), 2015.

Experience

RESEARCH ASSISTANT **Toronto**
University of Toronto, supervised by Prof. Baochun Li 2015.09-present

TEACHING ASSISTANT **Toronto**
University of Toronto

- CSC 444: Software Engineering (*by Prof. Michael Stumm*). 2017.09-12, 2018.09-12
- CSC 369: Operating Systems (*by Dr. Sina Meraji*). 2017.05-08
- ESC 499: Engineering Science Thesis (*students: Zhongyang Xiao and Luyuan Chen*). 2016.10-2017.04
- ECE 344: Operating Systems (*by Prof. Ashwin Goel*). 2016.09-12
- CSC 343: Introduction to Databases (*by Dr. Marina Barsky*). 2016.05-08
- ECE 353: Systems Software (*by Prof. Baochun Li*). 2016.01-04, 2017.01-04, 2018.01-04
- CSC 458: Computer Networks (*by Prof. Yashar Ganjali*). 2015.09-12, 2016.09-12

RESEARCH INTERN **Beijing**
Microsoft Research Asia, supervised by Dr. Yongqiang Xiong 2015.4-2015.8

- Optical networking solutions for datacenter network.

RESEARCH INTERN **Hong Kong**
Hong Kong University of Science and Technology, supervised by Prof. Kai Chen 2013.11-2014.12

- Coflow prediction on distributed computing cluster.
- Flowlet-based load balancing scheduler in datacenter network.

FULL-STACK DEVELOPER **Shanghai**
Ramy Tech Inc. 2013.06-2013.11

- Co-founder of AmyPI API Market. AmyPI Market won 2013 Yunfeng Prize funded by Alibaba Cloud Inc.

DEVELOPMENT INTERN **Shanghai**
Intel Asia-Pacific Research and Development Ltd. 2011.12-2012.12

- Participated in CloudScore, a performance evaluation platform for IaaS Cloud system.

RESEARCH ASSISTANT **Shanghai**
National Undergraduate Innovation Program, Supervised by Prof. Xiaochao Zi 2009.11-2010.11

- Designed and developed a tool to detect Linux system calls and to defend buffer overflow attacks.

Selected Awards

University of Toronto Fellowship, Department of ECE, University of Toronto 2015
Edward S. Rogers Sr. Graduate Scholarships, University of Toronto 2015
Yunfeng Prize, The 2nd Alibaba Cloud Computing Developer Competition (Top 1%) 2013
Second-Class Post-Graduate Scholarship, Shanghai Jiao Tong University 2012
Third Prize, The 4th National College Information Security Contest 2011
Successful Participant Award, Mathematical Contest in Modeling (MCM) 2011
Second-Class Academic Excellence Scholarship, Shanghai Jiao Tong University 2009

Skills and Others

Project Experience: MXNet, TensorFlow, Spark, Hadoop, OpenFlow, OpenStack, AWS

Programming Language: Python, C/C++, Java, Scala, JavaScript, HTML/CSS, \LaTeX

English Proficiency: TOEFL: 95, GRE: 307+3.0