XIN JIN

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EDUCATION

Princeton University 09/2011-08/2016 (expected)
Ph.D., Computer Science, GPA: 3.9/4.0
Advisor: Jennifer Rexford
Thesis: Dynamic Management of Software-Defined Networks

Peking University 09/2007-07/2011
B.S., Computer Science, GPA: 3.8/4.0, Rank: 1/130
B.A., Economics (Double Major), GPA: 3.8/4.0

PUBLICATIONS

1. **Xin Jin**, Jennifer Gossels, Jennifer Rexford, David Walker, "CoVisor: A compositional hypervisor for software-defined networks", in *USENIX Symposium on Networked Systems Design and Implementation (NSDI)*, May 2015.
2. Xuan Kelvin Zou, Jeffrey Erman, Vijay Gopalakrishnan, Emir Halepovic, Rittwik Jana, **Xin Jin**, Jennifer Rexford, and Rakesh K. Sinha, "Can accurate predictions improve video streaming in cellular networks?", in *ACM HotMobile*, February 2015.
3. **Xin Jin**, Hongqiang Harry Liu, Rohan Gandhi, Srikanth Kandula, Ratul Mahajan, Ming Zhang, Jennifer Rexford, Roger Wattenhofer, "Dynamic scheduling of network updates", in *ACM SIGCOMM*, August 2014.
4. **Xin Jin**, Jennifer Rexford, David Walker, "Incremental update for a compositional SDN hypervisor", in *ACM SIGCOMM HotSDN Workshop*, August 2014.
5. **Xin Jin**, Li Erran Li, Laurent Vanbever, Jennifer Rexford, "SoftCell: Scalable and flexible cellular core network architecture", in *ACM SIGCOMM CoNEXT Conference*, December 2013.
6. Ziyu Shao, **Xin Jin**, Wenjie Jiang, Minghua Chen, Mung Chiang, "Intra-data-center traffic engineering with ensemble routing", in *IEEE International Conference on Computer Communications (INFOCOM)*, April 2013.
7. **Xin Jin**, Eric Keller, Jennifer Rexford, "Virtual switching without a hypervisor for a more secure cloud", in *USENIX Workshop on Hot Topics in Management of Internet, Cloud, and Enterprise Networks and Services (Hot-ICE)*, April 2012.
8. ChaoYi Bian, **Xin Jin**, Chao Liu, XiaoMing Li, Wei Yan, "Relative link quality assessment and hybrid routing scheme for wireless mesh networks", in *IEEE International Conference on Communications (ICC)*, June 2011.
9. **Xin Jin**, Weijie Su, Wei Yan, "Quantitative analysis of the VANET connectivity: Theory and application", in *IEEE Vehicular Technology Conference (VTC)*, May 2011.
10. **Xin Jin**, Weijie Su, Wei Yan, "A study of the VANET connectivity by percolation theory", in *IEEE Intelligent Vehicular Communications System Workshop (IVCS)*, January 2011.
11. Weijie Su, **Xin Jin**, "Hidden markov model with parameter-optimized k-means clustering for handwriting recognition", in *IEEE International Conference on Intelligent Information Technology Application (IITA)*, November 2010.

EXPERIENCE

Rockley Photonics 02/2015-06/2015

Research Intern, Mentor: Nathan Farrington

- Designed, implemented and evaluated the world's lowest-power and highest-capacity data center communication product, leveraging Rockley's third generation high-performance silicon photonics platform.

Microsoft Research Redmond 06/2013-02/2014

Research Intern, Mentors: Srikanth Kandula, Ratul Mahajan, Jitu Padhye, Ming Zhang

- Designed *Dionysus*, a system that can perform fast, consistent network updates for software-defined networks. Implemented a prototype with 5000+ lines of code in C#. Evaluations showed that it improved update speed by 53-88% as compared to prior methods.

Princeton University

Teaching Assistant, COS 561 Advanced Computer Networks Fall 2014

Teaching Assistant, COS 333 Advanced Programming Techniques Spring 2013, Spring 2014

WeaverMobile 07/2011-08/2011

Software Development Intern, Mentors: Mike Ji, Raymond Wei, Xiaosong Yang

- *Smartphone Application Development*:
  Developed *WeConnect*, an iOS application for a location-based social network service. Built and maintained iOS software developing infrastructure.

Microsoft Research Asia 07/2010-08/2010

Research Intern, Mentor: Chuanxiong Guo

- *Bandwidth Guarantee for Virtual Data Centers in the Hose Model*:
  Designed algorithms to allocate network resources (link capacity) to multiple tenants. Proved NP-hardness (or not) of the problem in different settings. Evaluated both the efficiency and effectiveness of the algorithms with simulations.

AWARDS AND HONORS

- Siebel Scholar, Class of 2016
- Charlotte Elizabeth Procter Fellowship, 2015
- Princeton University Graduate Fellowship, 2011
- Beijing Outstanding Graduates (5%), 2011
- Peking University Outstanding Graduates (10%), 2011
- National Scholarship (2%), 2009 & 2010
- China Economic Research Scholarship (1%), 2010
- Peking University Merit Student (5%), 2008 & 2009
- Suzhou Industrial Park Scholarship (1%), 2008

PROFESSIONAL SERVICES

Reviewer: ACM MobiHoc 2015, IEEE Transactions on Mobile Computing 2014-2015, IEEE/ACM Transactions on Networking 2014-2015, IEEE Transactions on Vehicular Technology 2014, IEEE ICNP 2013, IEEE Communication Magazine 2013, IEEE VTC 2013

Technical Program Committee: ACM International Workshop on Hot Topics in Planet-scale mObile computing and online Social neTworking (HotPost) 2015