



Zhiying Xu

zhiyingxu@g.harvard.edu 
http://xuzhiying9510.github.io 
(+1)857-253-8842
SEC 4.429, 150 Western Ave,
Boston, MA 02134

EDUCATION

Harvard University

Ph.D. in Computer Science, Advisor: Minlan Yu

Cambridge, US

2018 — Current

Shanghai Jiao Tong University

B.S. in Information Engineering, GPA: 3.85/4.00

Shanghai, CN

2014 — 2018

WORK EXPERIENCE

Research Intern at Microsoft Research

Mentor: Francis Yan

Redmond, US

Summer 2022

PUBLICATIONS

- [1] **Z. Xu**, S. Ramanathan, A. M. Rush, J. Mirkovic, and M. Yu, “Xatu: Boosting existing ddos detection systems using auxiliary signals”, in *International Conference on emerging Networking EXperiments and Technologies*, 2022.
- [2] L. Fu, J. Xu, S. Qu, **Z. Xu**, X. Wang, and G. Chen, “Seeking the truth in a decentralized manner”, *IEEE/ACM Transactions on Networking*, 2021.
- [3] J. Zhou, **Z. Xu**, A. M. Rush, and M. Yu, “Automating botnet detection with graph neural networks”, in *AutoML for Networking and Systems Workshop of MLSys Conference*, 2020.
- [4] L. Fu, X. Fu, Z. Zhang, **Z. Xu**, X. Wu, X. Wang, and S. Lu, “Joint optimization of multicast energy in delay-constrained mobile wireless networks”, *IEEE/ACM Transactions on Networking*, 2018.
- [5] L. Fu, X. Fu, **Z. Xu**, Q. Peng, X. Wang, and S. Lu, “Determining source-destination connectivity in uncertain networks: Modeling and solutions”, *IEEE/ACM Transactions on Networking*, 2017.
- [6] X. Fu, Z. Hu, **Z. Xu**, L. Fu, and X. Wang, “De-anonymization of networks with communities: When quantifications meet algorithms”, in *IEEE Global Communications Conference*, 2017.
- [7] X. Fu, **Z. Xu**, Q. Peng, L. Fu, and X. Wang, “Complexity vs. optimality: Unraveling source-destination connection in uncertain graphs”, in *The IEEE Conference on Computer Communications*, 2017.
- [8] X. Fu, **Z. Xu**, Q. Peng, J. You, L. Fu, X. Wang, and S. Lu, “Conmap: A novel framework for optimizing multicast energy in delay-constrained mobile wireless networks”, in *International Symposium on Mobile Ad Hoc Networking and Computing*, 2017.

PATENT

- **Proactive DDoS Detection with Auxiliary Signals**
U.S. Provisional Application No. 63/183,096
Sivaramakrishnan Ramanathan, Zhiying Xu and Minlan Yu

2021

SKILLS

- **Programming:** C/C++, Python, Verilog, VHDL.
- **Tools:** Pytorch, TensorFlow, CUDA, OpenFlow, Xilinx ISE, FPGA, Cortex-M, MATLAB, LaTeX

GRADUATE COURSES

Machine Learning, Decision Theory, Advanced Computer Networks, Cloud Networking and Computing, Algorithms at the Ends of the Wire, Systems Development for Computational Science

TEACHING EXPERIENCE

- **Teaching Assistant** at Harvard University Spring 2020
Computing Foundations for Computational Science
Instructor: Ignacio M. Llorente, David Sondak
- **Teaching Assistant** at Harvard University Fall 2022
Advanced Computer Networks
Instructor: Minlan Yu