Fangfan Li

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EDUCATION

Northeastern University

Boston, MA

Ph.D. Candidate in Computer Science (GPA: 3.71/4.0)

Aug 2015 - Expected May 2020

Email: li.fa@husky.neu.edu

Duke University

Durham, NC

Master of Science in Electrical & Computer Engineering (GPA: 3.92/4.0)

Aug 2013 - Dec 2014

University of Electronic Science and Technology of China

Chengdu, China

Bachelor of Science in Electrical Engineering (GPA: 3.83/4.0)

Sep 2009 - June 2013

SELECTED RESEARCH PROJECTS

• Wehe Jun 2017 - Present

- Developed the Wehe android/iOS mobile app for detecting net neutrality violations (i.e., traffic differentiation)
- \circ More than 100,000 users have downloaded Wehe, and conducted more than one million tests
- Wehe detects traffic differentiation in 30 Internet Service Providers in 7 countries, and this work was covered by Bloomberg, Vice News, the Boston Globe, and others
- Our findings have been used by the French national telecom regulator, the US FTC and FCC, US Senators, and numerous US state legislators

• Liberate Oct 2016 - June 2017

- Performed an empirical measurement of network neutrality violations across six different networks
- Designed an application-agnostic approach to identifying network neutrality violations and circumventions
- Classifiers Unclassified

Jan 2016 - Aug 2016

- Developed a general methodology for identifying the matching rules used by network traffic classifiers
- This work helped testimony which was taken into consideration by the CRTC (Canadian Radio-television and Telecommunications Commission) in banning differential pricing that violates network neutrality in Canada
- Binge On Under the Microscope

Oct 2015 - Apr 2016

- o Characterized how T-Mobile's Binge On program differentially impacts content providers and customers
- This work was covered by BostInno, Consumer Affairs, TechDirt, Fierce Wireless, and others

PUBLICATIONS

- A Large-Scale Analysis of Deployed Traffic Differentiation Practices, Fangfan Li et al. In Proceedings of ACM SIGCOMM, Beijing, China, Aug. 2019
- lib·erate (n): A library for exposing (traffic-classification) rules and avoiding them efficiently, Fangfan Li et al. In Proceedings of the ACM Internet Measurement Conference, London, UK, Nov. 2017
- Classifiers Unclassified: An Efficient Approach to Revealing IP Traffic Classification Rules, Fangfan Li et al. In Proceedings of the ACM Internet Measurement Conference, Santa Monica, CA, Nov. 2016
- Binge On Under the Microscope: Understanding T-Mobile's Zero-Rating Implementation, Arash Molavi Kakhki, **Fangfan Li** et al. In Proceedings of SIGCOMM Internet-QoE Workshop, Aug. 2016

EXPERIENCE

Facebook Cambridge, MA

External Research Collaborator, Network Traffic Team

Spring 2020 Seattle, WA

Software Engineer Intern, Network Traffic Team

Summer 2018, Summer 2019

Programming Skills

• Languages: Python, C/C++, Java, HTML/CSS, SQL, R, JavaScript Technologies: AWS, MatLab, Git