Shan Jiang | Curriculum Vitae

660-674, Interdisciplinary Science & Engineering Complex, 805 Columbus Ave, Boston, MA 02120

(+1) 781-502-8799 | sjiang@ccs.neu.edu | shanjiang.me | printfoo | shan-jiang

Education

Ph.D. in Computer Science — Expected 2021
Northeastern University — *Boston, MA, USA*
- Advisor: Christo Wilson | GPA: 3.9/4.0

B.B.A. in Information Management and Information Systems — 2016
Beijing University of Posts and Telecommunications — *Beijing, China*
- Rank: 1/46 | GPA: 92.5/100

Selected Projects

Is YouTube's Content Moderation Biased, or Not? — *Jan. 2018 - Sep. 2018*
The claim of content moderation being biased against conservatives is a misperception from correlation to causation. | *Submitted to* CHI'19.
- Built a dataset of the misinformation ecosystem surrounding YouTube, including veracity, political leaning, user engagement for 80K+ comments;
- Performed statistical tests to show the difference in moderation likelihood for user comments under left- and right- leaning videos;
- Used a causal model (propensity score matching) to show that the above difference is not caused by political leaning but other confounders;
- Simulated model dynamics under a variety of hypotheses for robustness checks.

How do "Fake News" and Fact-Checking Affect People? — *Nov. 2017 - Aug. 2018*
People get touchy about misinformation, and about the truth too. | *Published at* CSCW'18.
- Implemented crawlers to collect 5K+ fact-check articles from Snopes and PolitiFact, and 2M+ comments from Facebook, Twitter and YouTube;
- Built a topical lexicon ComLex using a hybrid method of unsupervised learning (word2vec, spectral clustering) and human evaluation;
- Performed statistical tests to show different word usage in user comments for truthful/fake news and before/after fact-check;
- Built predictive models to show that such difference in user comments can help with fake news detection.

Do Google's Search Engine Result Pages Have Partisan Bias? — *Sep. 2016 - Aug. 2018*
Search results show consistent bias with input queries, and no evidence for "filter bubbles". | *Published at* CSCW'18.
- Recruited 200+ participants to install browser extensions that enabled us to collect search data from their computers;
- Calculated partisan bias score based on a dataset of 100M+ Tweets using Apache Spark (Visualization: polarshare.shanjiang.me);
- Performed statistical tests to show the correlation between partisan bias and rankings in Google's search engine result pages.

Are Ridesharing Services Equally Accessible? — *Sep. 2016 - Apr. 2018*
The quality of Uber and Lyft's services worsen in high-diversity and low-income neighborhoods. | *Published at* WWW'18.
- Intercepted Uber and Lyft's mobile traffic using man-in-the-middle (MITM) proxy and built structured requests for data collection;
- Implemented crawlers to collect driver's trajectory data from Uber and Lyft in San Fransisco and New York City for 2 months;
- Analyzed 10TB+ data using Apache Spark to discover spatio-temporal patterns of ridesharing services (Visualization: tncstoday.sfcta.org);
- Used a spatial econometric model to show the inequality of ridesharing accessibility.

Peer-Reviewed Publications

Who's the Guinea Pig? Investigating Online A/B/n Tests in-the-Wild — FAT*'19
Shan Jiang, John Martin, and Christo Wilson — *Acceptance Rate: 24.1%*

Linguistic Signals under Misinformation and Fact-Checking: Evidence from User Comments on Social Media — CSCW'18
Shan Jiang, and Christo Wilson — *Acceptance Rate: 25.6%*

Auditing Partisan Audience Bias within Google Search — CSCW'18
Ronald E Robertson, Shan Jiang, Kenneth Joseph, Lisa Friedland, David Lazer, and Christo Wilson — *Honorable Mention: 2.7%* | *Acceptance Rate: 25.6%*

On Ridesharing Competition and Accessibility: Evidence from Uber, Lyft, and Taxi — WWW'18
Shan Jiang, Le Chen, Alan Mislove, and Christo Wilson — *Acceptance Rate:14.8%*

Conflicts in Overlay Environments: Inefficient Equilibrium and Incentive Mechanism — KSII-TIIS'16
Jianxin Liao, Jun Gong, Shan Jiang, Tonghong Li, and Jingyu Wang — *Impact Factor: 0.611*

Interactions of Overlays and Traffic Engineering: Equilibrium and Cooperation without Payment — GLOBECOM'15
Shan Jiang, Jun Gong, Jingyu Wang, Jianxin Liao, and Tonghong Li — *Acceptance Rate: 35.0%*

Competitive Equilibrium and Stable Coalition in Overlay Environments — LCN'15
Shan Jiang, Jianxin Liao, Jun Gong, Jingyu Wang, and Tonghong Li — *Acceptance Rate: 30.3%*

Combination Feature for Image Retrieval in the Distributed Datacenter — ICPADS'14
Di Yang, Jianxin Liao, Qi Qi, Jingyu Wang, Haifeng Sun, and Shan Jiang — *Acceptance Rate: 29.8%*

Miscellaneous

Skills Python, Java, Javascript, C/C++, Matlab, R, SQL, etc. | Apache Spark, Apache Hadoop, HDFS, Linux, Vega Lite, etc.
Reviewer CHI'19, CSCW'18, WWW'18 (external)