

Shan Jiang | Curriculum Vitae

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Education

Northeastern University

Ph.D. in Computer Science

• Advisor: Christo Wilson | GPA: 3.9/4.0

Boston, MA

Sep 2016 - 2021 (Expected)

Beijing University of Posts and Telecommunications

B.B.A. in Information Management and Information Systems

• Rank: 1/46 | GPA: 92.5/100

Beijing, China

Sep 2012 - Jul 2016

Experience

Dataminr

Research Intern @ Artificial Intelligence and Data Science Team

• Advised by Alejandro Jaimes, doing research on crisis informatics and emergency response.

New York, NY

Feb 2019 - Present

Northeastern University

Research Assistant @ Khoury College of Computer Sciences

• Advised by Christo Wilson, doing research on social computing, computational social science and human-computer interaction.

Boston, MA

Sep 2016 - Present

National University of Singapore

Research Assistant @ School of Computing

• Advised by Richard TB Ma, worked on economic modeling of bitcoin and blockchain.

Singapore

Dec 2015 - May 2016

Beijing University of Posts and Telecommunications

Research Assistant @ State Key Lab of Networking and Switching Technology

• Advised by Jingyu Wang, worked on game-theoretic modeling and analysis of overlay network.

Beijing, China

Oct 2013 - Dec 2015

Publications

Bias Misperceived: The Role of Partisanship and Misinformation in YouTube Comment Moderation

[Shan Jiang](#), Ronald E Robertson, and Christo Wilson

ICWSM'19

Auditing Autocomplete: Suggestion Networks and Recursive Algorithm Interrogation

Ronald E Robertson, [Shan Jiang](#), David Lazer, and Christo Wilson

WebSci'19

Auditing the Partisanship of Google Search Snippets

Desheng Hu, [Shan Jiang](#), Ronald E Robertson, and Christo Wilson

WWW'19

Acceptance Rate: 18.0%

Who's the Guinea Pig? Investigating Online A/B/n Tests in-the-Wild

[Shan Jiang](#), John Martin, and Christo Wilson

FAT*19

Acceptance Rate: 24.1%

Linguistic Signals under Misinformation and Fact-Checking: Evidence from User Comments on Social Media

[Shan Jiang](#), and Christo Wilson

CSCW'18a

Acceptance Rate: 25.6%

Auditing Partisan Audience Bias within Google Search

Ronald E Robertson, [Shan Jiang](#), Kenneth Joseph, Lisa Friedland, David Lazer, and Christo Wilson

CSCW'18b

Honorable Mention | Acceptance Rate: 25.6%

On Ridesharing Competition and Accessibility: Evidence from Uber, Lyft, and Taxi

[Shan Jiang](#), Le Chen, Alan Mislove, and Christo Wilson

WWW'18

Acceptance Rate: 14.8%

Conflicts in Overlay Environments: Inefficient Equilibrium and Incentive Mechanism

Jianxin Liao, Jun Gong, [Shan Jiang](#), Tonghong Li, and Jingyu Wang

KSII-TIIS'16

Impact Factor: 0.611

Interactions of Overlays and Traffic Engineering: Equilibrium and Cooperation without Payment

[Shan Jiang](#), Jun Gong, Jingyu Wang, Jianxin Liao, and Tonghong Li

GlobeCom'15

Acceptance Rate: 35.0%

Competitive Equilibrium and Stable Coalition in Overlay Environments

[Shan Jiang](#), Jianxin Liao, Jun Gong, Jingyu Wang, and Tonghong Li

LCN'15

Acceptance Rate: 30.3%

Combination Feature for Image Retrieval in the Distributed Datacenter

Di Yang, Jianxin Liao, Qi Qi, Jingyu Wang, Haifeng Sun, and [Shan Jiang](#)

ICPADS'14

Acceptance Rate: 29.8%

Skills

Languages

Python, Java, C/C++, R, Matlab, SQL, HTML/CSS, Javascript

Platforms

Apache Spark, Apache Hadoop, Linux, Vega/Vega Lite

Tools

pandas, numpy, scipy, statsmodels, nltk, tensorflow, scikit-learn, geopandas, matplotlib

Honors and Awards

Honorable Mention	for top 2.7% (30/1106) papers at CSCW, awarded for CSCW'18b	2018
Graduate Fellowship	for first-year Ph.D. students at Northeastern University	2016-2017
Outstanding Undergraduate	for top undergraduate students in the city of Beijing	2016
National Scholarship	for top 1% students at Beijing University of Posts and Telecommunications	2014-2015
First-Class Scholarship ×2	for top 1% students at Beijing University of Posts and Telecommunications	2013-2014, 2015-2016

Selected Projects

Is YouTube's Content Moderation Biased, or Not?

Jan 2018 - Present

The claim of content moderation being biased against conservatives is but a misperception from correlation to causation.

- Built a dataset of the ecosystem surrounding YouTube, including video 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 above difference is not caused by political leaning but other confounders;
- Simulated model dynamics under a variety of hypotheses for robustness checks;
- A paper published at [ICWSM'19](#).

How do "Fake News" and Fact-Checking Affect People?

Nov 2017 - Nov 2018

Social media users use more emojis and swear words under misinformation. Fact-checking has both corrective and "backfire" effects.

- Collected 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;
- A paper published at [CSCW'18a](#).

Do Google's Search Engine Result Pages Have Partisan Bias?

Sep 2016 - Nov 2018

Search results show consistent bias with input queries, and no significant evidence for "filter bubbles" on political ideology.

- 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;
- Performed statistical tests to show the correlation between partisan bias and rankings in Google's search engine result pages;
- A paper published at [CSCW'18b](#), a visualization system available at [polarshare.shanjiang.me](#).

Are Ridesharing Services Equally Accessible?

Sep 2016 - Apr 2018

The quality of Uber and Lyft's services worsen in high-diversity areas in San Francisco and low-income areas in New York City.

- 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 Francisco and New York City for 2 months;
- Analyzed 10TB+ data using Apache Spark to discover spatio-temporal patterns of ridesharing services;
- Used a spatial econometric model to show the inequality of ridesharing accessibility;
- A paper published at [WWW'18](#), a report published by [SFCTA](#), a visualization system available at [tncstoday.sfcta.org](#).

Service

Reviewer ICWSM'19, CHI'19, CSCW'18, WWW'18