

# Shan Jiang | Curriculum Vitae

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

☎ (+1) 781-502-8799 | ✉ [sjiang@ccs.neu.edu](mailto:sjiang@ccs.neu.edu) | 🏠 [shanjiang.me](http://shanjiang.me) | 🖨️ printfoo | 🌐 [shan-jiang](https://shan-jiang.github.io)

## Education

### Northeastern University

Boston, MA

*Ph.D. in Computer Science*

Sep 2016 - Present

- Advisor: Christo Wilson | GPA: 3.9/4.0

### Beijing University of Posts and Telecommunications

Beijing, China

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

Sep 2012 - Jul 2016

- Rank: 1/46 | GPA: 92.5/100

## Experience

### Dataminr

New York, NY

*Research Intern @ Artificial Intelligence and Data Science Team*

Feb 2019 - Present

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

### Northeastern University

Boston, MA

*Research Assistant @ Khoury College of Computer Sciences*

Sep 2016 - Present

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

### National University of Singapore

Singapore

*Research Assistant @ School of Computing*

Dec 2015 - May 2016

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

### Beijing University of Posts and Telecommunications

Beijing, China

*Research Assistant @ State Key Lab of Networking and Switching Technology*

Oct 2013 - Dec 2015

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

## Publications

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

ICWSM'19

Shan Jiang, Ronald E Robertson, and Christo Wilson

### Auditing the Partisanship of Google Search Snippets

WWW'19

Desheng Hu, Shan Jiang, Ronald E Robertson, and Christo Wilson

Acceptance Rate: 18.0%

### 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'18a

Shan Jiang, and Christo Wilson

Acceptance Rate: 25.6%

### Auditing Partisan Audience Bias within Google Search

CSCW'18b

Ronald E Robertson, Shan Jiang, Kenneth Joseph, Lisa Friedland, David Lazer, and Christo Wilson

Honorable Mention | 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%

## 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

---

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