

# Jason Shuo Zhang

---

**Address**

Unter den Eichen 96,  
Berlin, Germany, 12205

**Homepage  
Email**

www.jasondarkblue.com  
jasonzhang@colorado.edu

## Research Interests

Computational social science, machine learning, natural language processing, data science, and recommender systems

## Professional Experience

May 2019-  
Aug 2019    Twitter, Political Investigation Data Science Team, San Francisco, USA  
*Data Science Intern*

**IRA (Russian bots) Account Characterization and Expansion**

I develop a time-series clustering-based misbehavior detection model. This model can effectively identify accounts that are still active on the Twitter platform and have illegal purposes (e.g., Russian bots). The deployment of this detection model to the Twitter platform helps detect state-backed accounts created by other foreign countries, such as the United Arab Emirates and Ecuador.

May 2017-  
Aug 2017    Criteo AI Lab, Palo Alto, USA  
*Research Intern*

**The Effect of Banner Diversity in Internet Purchasing**

I design a computational model to understand the effect of banner diversity on click-through rate (CTR) of Criteo's advertising systems. By incorporating the banner diversity feature into the Criteo recommendation framework and running offline A/B tests on 30 days' Criteo real-traffic advertising data, the recommendation model outperforms the baselines by a significant margin.

## Education

2020-now    Postdoc Researcher — Max Planck Institute, Center for Humans and Machines, Berlin, Germany  
*Advisor:*                                  Manuel Cebrian and Nick Obradovich

2015-2020    Ph.D. in Computer Science — University of Colorado Boulder, CO, USA  
*Advisor:*                                  Qin Lv and Chenhao Tan

2015-2018    M.S. in Computer Science — University of Colorado Boulder, CO, USA  
*Advisor:*                                  Qin Lv

## Skills

**■ Programming:**

- Proficient: Python (Numpy, Pandas, Scikit-Learn)
- Skillful: Matlab, Java, and SQL (MySQL)
- Experienced: PyTorch, TensorFlow

**■ Theory:**

Data Science, Machine Learning, Natural Language Processing, Probability, Statistical Inference, and Recommender Systems.

## Selected Publications in Top Computer Science Conferences

- **Understanding the Diverging User Trajectories in Highly-related Online Communities during the COVID-19 Pandemic**  
**Jason Shuo Zhang**, Brian Keegan, Qin Lv, and Chenhao Tan  
*Proceedings of the International AAAI Conference on Web and Social Media (ICWSM), 2021*
- **Analyzing Twitter Users' Behavior Before and After Contact by the Internet Research Agency**  
Upasana Dutta, Rhett Hanscom, **Jason Shuo Zhang**, Richard Han, Tamara Lehman, Qin Lv, Shivakant Mishra  
*Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2021*
- **Intergroup Contact in the Wild: Characterizing Language Differences between Intergroup and Single-group Members in NBA-related Discussion Forums**  
**Jason Shuo Zhang**, Chenhao Tan, and Qin Lv  
*Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2019*
- **GEVR: An Event Venue Recommendation System for Groups of Mobile Users**  
**Jason Shuo Zhang**, Mike Gartrell, Richard Han, Qin Lv, and Shivakaht Mishra  
*Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (UbiComp/IMWUT), 2019*
- **"This is why we play": Characterizing Online Fan Communities of the NBA Teams**  
**Jason Shuo Zhang**, Chenhao Tan, and Qin Lv  
*Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2018*
- **Understanding Group Event Scheduling via the OutWithFriendz Mobile Application**  
**Jason Shuo Zhang**, Khaled Alanezi, Mike Gartrell, Richard Han, Qin Lv, and Shivakaht Mishra  
*Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (UbiComp/IMWUT), 2017*

## Awards

2020	Outstanding Ph.D. Research Award AY19-20, Computer Science Department, University of Colorado Boulder (One of the four recipients)
2020	Second-Place Winner at CU Boulder's Three Minute Thesis Speech Competition (2nd place among 30 Ph.D. candidates)
2019	Outstanding PhD Research Award AY18-19, Computer Science Department, University of Colorado Boulder (One of the four recipients)
2019	NSF Computer Systems Research (CSR) Spotlight Project: OutWithFriendz
2015-2016	Dean's Graduate Assistantship, University of Colorado Boulder

## Teaching Experience

Sept 2019 -	University of Colorado Boulder
Dec 2019	<i>Teaching Assistant for CSCI 6000 Intro to PhD</i>
Fall 2019	
Jan 2019 -	University of Colorado Boulder
May 2019	<i>Teaching Assistant for CSCI 2270 Data Structure</i>
Spring 2019	