Zhanna Terechshenko

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I am a computational social scientist with experience in machine learning methods and text analysis for social media data and social network problems.

ACADEMIC APPOINTMENTS

New York University, Center for Social Media and Politics (CSMaP)

2019 -

Postdoctoral Associate

EDUCATION & TECHNICAL SKILLS

The Pennsylvania State University

Ph.D. in Political Science and Social Data Analytics

2019

Nazarbayev University

BA in Political Science and International Relations

2015

Programming: Python, R, SQL, Stan

Quantitative methods: Deep Learning with focus on Natural Language Processing, Bayesian Statistics, Machine

Learning, Latent Variable Modeling, Social Network Analysis

Languages: Russian (native), English (advanced), French (upper-intermediate), Spanish (intermediate)

Selected Projects

Network Embedding Methods for Large Networks in Political Science

Present

• Analyzed the performance of prominent network embedding methods, such as Node2Vec, DeepWalk, LINE, SINE, and GraphSAGE on prediction of ideology of Twitter users and ideology of Internet domains. SSRN

Influential Users in the Common Core and Black Lives Matter Conversations on Twitter

Present

- Analyzed what type of users were driving the conversation around Common Core and Black Lives Matter on Twitter over time in order to understand politicization of issues online
- Conducted data wrangling and data analysis of 14 million tweets. Data Report

Text Classification Using a Transformer-Based Model

2020

- Compared the performance of transformer-based and traditional machine learning models across the various social media and political science datasets to provide guidelines for political scientists interested in using these models in their research
- Contributed to the wrapper for a stable version of RoBERTa language model. Tutorial

PEER-REVIEWED PUBLICATIONS

Zhanna Terechshenko. "Hot Under the Collar: A Latent Measure of Interstate Hostility". *Journal of Peace Research* 57(6):764-776 (November 2020).

Zhanna Terechshenko, Charles Crabtree, Chris Fariss, and Kristine Eck. "Evaluating the Influence of International Norms and Shaming on State Respect for Rights: An Audit Experiment with Foreign Embassies". *International Interactions* 45(4):720-735 (September 2019).

Press & Media

Zhanna Terechshenko, Megan Brown, Niklas Loynes, Tom Paskhalis, and Jonathan Nagler. "Biden and Sanders are debating tonight. What got Twitter users buzzing during past Democratic debates?" *The Washingon Post, Monkey Cage Blog* (March 15, 2020)

WORKING PAPERS

Zhanna Terechshenko, Fridolin Linder, Vishakh Padmakumar, Leon Yin, Fengyuan Liu, Jonathan Nagler, Joshua A. Tucker, Richard Bonneau. "A Comparison of Methods for Transfer Learning in Political Science Text Classification." Available at SSRN

Zhanna Terechshenko, Cody Buntain, Kevin Aslett, Tom Paskhalis, Richard Bonneau, Jonathan Nagler, Joshua A. Tucker. "Estimating Impacts of Ideology in Fake News Reports in a Recent Release of Differentially Private Facebook Data." Social Science One.

Zhanna Terechshenko, Megan A. Brown, Richard Bonneau, Jonathan Nagler, Joshua A. Tucker. "Using Language Embeddings with Synthetic Minority Oversampling Technique ("LESMOTE")."

Megan A. Brown, **Zhanna Terechshenko**, Rachel Connolly, Angela Lai, Tianxin Ji, Richard Bonneau, Jonathan Nagler, Joshua A. Tucker. "Network Embedding Methods for Large Networks in Political Science." Available at SSRN (Under Review)

Sean Kates, **Zhanna Terechshenko**, Richard Bonneau, Joshua A. Tucker, Jonathan Nagler. "Controlling the Discourse: Who Steers Conversation on Social Media?"

Denis Stukal, **Zhanna Terechshenko**, Angela Lai, Richard Bonneau, Jonathan Nagler, Joshua A. Tucker. "Candidates under Attack? Bots and the Twitter Information Ecosystem during the 2016 U.S. Presidential Election."

Haohan Chen, **Zhanna Terechshenko**, Patrick Y. Wu, Richard Bonneau, Jonathan Nagler, Joshua A. Tucker. "Hate Trumps Love? Political Sectarianism on Twitter."

INVITED TALKS

"Feature Representation in Text Data: From Bag of Words to Language Models." Summer School on Computational Social Science (SICSS Rutgers), Rutgers University, June 2021.

AWARDS & FELLOWSHIPS

| Best Political Science Master's Essay Award, The Pennsylvania State University | 2017 |
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| Political Science Graduate Research Fellowship, The Pennsylvania State University | 2017 |
| Steighton (Steve) A. Watts, Jr. Endowed Graduate Scholarship in Political Science, | |
| The Pennsylvania State University | 2016 |
| Robert W. Graham Endowed Graduate Fellowship, The Pennsylvania State University | 2015 |
| Outstanding Student in Political Science and International Relations, Nazarbayev University | 2014 |