Zhanna Terechshenko

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Computational social scientist with experience in machine learning methods and text analysis for social media data and social network problems.

Job Experience

TikTok Science Lab	2023 - Present

Research Scientist

Generating data-driven insights around user safety anf platform integrity

Academic Appointments

New York University, Center for Social Media and Politics (CSMaP)	2019 - 2023

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.

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. "Influential Users in the Common Core and Black Lives Matter Social Media Conversation."

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
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