



Amir Ali Tafreshi

Degree: PhD

Research Title: Analysis of the Penetration and Impact of Fake News on Persian Twitter; Measuring the Influence of Cyber Forces at the Core and Center of Conversation Networks During the COVID-19 Pandemic and Identifying the Political Geography, Behaviors, and Content Framing of These Forces

Research Type: Doctoral Dissertation

Rank: Third Prize Winner, Young Section

Group: Social Sciences and Communication Sciences

About the Researcher

Dr. Amir Ali Tafreshi, a researcher in the field of social communication sciences, began his studies with a Bachelor's in Journalism from Allameh Tabataba'i University. He then completed his Master's and Doctorate in Communication Sciences at the University of Tehran. His research areas of interest include computational social science, computational propaganda, and discourse analysis. He has published numerous articles in international scientific journals and reputable domestic publications. His book "Surrounded by Deceit; Fake News, Cyber Forces, and Cognitive Warfare" is among his forthcoming works. Achieving second place in the national call for "Understanding and Analyzing the Discourse and Behavior of Iranian Society During the COVID-19 Crisis," held by the Vice Presidency for Science and Technology, is another of his honors. Dr. Tafreshi is currently engaged in research activities in the fields of media and social networks.



ABSTRACT

This research, focusing on the fake news ecosystem in Iran's social media, examines the role of cyber forces as a new instrument of power for influencing public opinion during the COVID-19 pandemic. The main research question is whether fake news produced by cyber forces on Persian Twitter has been influential and prominent; what mechanisms and behaviors these forces have used to produce and disseminate content; what semantic framings each cluster has emphasized; and which social groups these forces have sought to polarize.

To answer these questions, research methods using big data, including computational propaganda, computational social science, and network analysis, were employed within the theoretical framework of agenda-setting and framing. For this study, over 4 million tweets related to COVID-19 keywords and hashtags were extracted and analyzed, and over 250,000 user accounts were evaluated using Botometer, DeBot, and the identification of suspicious accounts. Network analysis revealed the existence of 11 clusters and three patterns of fake force presence: fully fake and organized clusters, clusters with a mostly natural communication structure but serious infiltration of cyber forces at choke points, and clusters with a faint presence of fake users. This research also identified 17 types of actions and strategies by cyber forces and shows that each cluster emphasized specific semantic frames and polarizations. Overall, the findings indicate the existence of a full-scale cognitive war and the formation of a "contaminated public sphere" on Persian Twitter, where various groups compete to impose a fabricated consensus, without any one achieving final stabilization.