

2020 SBP-BRiMS Conference Agenda

Monday October 19 – Thursday October 22

**All times US Eastern. Updated October 18, 2020*

***Conference Presenters should prepare to join the session 10 minutes prior to the scheduled time below..*

Monday October 19, 2020 – Conference Day 1, Reception, & Keynote

Time	Session 1	Session 2	Session 3
8:45am – 9:00am	Welcome	Welcome	Welcome
9:00am – 10:30am	<p>Human Modeling Moderators: Adewale Obadimu, Thomas Marcoux, and Mustafa Alassad</p> <ul style="list-style-type: none"> Modeling Interventions for Insider Threat <i>Luke Osterritter and Kathleen Carley</i> Digital Trails of Work Stressors <i>Talha Oz</i> The Human Resource Management Parameter Experimentation Tool <i>Carmen Iasiello, Andrew Crooks, and Sarah Wittman</i> Homicidal Event Forecasting and Interpretable Analysis using Hierarchical Attention Model <i>Angeela Acharya, Jitin Krishnan, Desmond Arias and Huzefa Rangwala</i> 	<p>Diffusion Moderators: Thomas Magelinski, Mihovil Bartulovic, and Joshua Uyheng</p> <ul style="list-style-type: none"> Polarizing Tweets on Climate Change <i>Aman Tyagi, Matthew Babcock, Kathleen M. Carley and Douglas C. Sicker</i> Controversial information diffuses faster and further in Reddit <i>Jasser Jasser, Ivan Garibay, Steve Scheinert and Alexander V. Mantzaris</i> Breadth versus depth: the impact of tree structure on cultural influence <i>Rhodri L. Morris, Liam D. Turner, Roger M. Whitaker and Cheryl Giammanco</i> A Game-Transformation-based Framework to Understand Initial Conditions and Outcomes in the context of Cyber-enabled Influence Operations (CIOs) <i>Girish Sreevatsan Nandakumar and Jose Padilla</i> 	<p>DARPA Ground Truth Program and Challenge Design <i>Moderator: Ariel M. Greenberg or Asmeret Naugle</i></p> <ul style="list-style-type: none"> Introduction and program overview <i>Adam Russell</i> Simulations <ul style="list-style-type: none"> (A) <i>Andreas E Zufle</i> (B) <i>Scott Rager</i> (C, Ed) <i>David Pynadath</i> (D) <i>Van Parunak</i> Discussion and lessons learned
10:30am – 10:50am	BREAK		

<p>10:50am – 12:20pm</p>	<p>Agent Modeling Moderators: Shahan Ali Memon, Ibrahim Rahhal, and Christine Sowa</p> <ul style="list-style-type: none"> • Towards Agent Validation of a Military Cyber Team Performance Simulation <i>Geoffrey Dobson and Kathleen Carley</i> • Development of a Hybrid Machine Learning Agent Based Model for Optimization and Interpretability <i>Paul Cummings and Andrew Crooks</i> • Modeling Forced Migrant Populations Using ABMs <i>Melonie Richey</i> • Development of a Hybrid Machine Learning Agent Based Model for Optimization and Interpretability <i>Paul Cummings and Andrew Crooks</i> 	<p>Political Influence Moderators: Yigeng Zhang, Daniele Bellutta, and Mihovil Bartulovic</p> <ul style="list-style-type: none"> • Lying About Lying on Social Media: A Case Study of the 2019 Canadian Elections <i>Catherine King, Daniele Bellutta and Kathleen Carley</i> • PoliBERT: Classifying political social media messages with BERT <i>Shloak Gupta, Sarah Bolden, Jay Kachhadia, Ania Korsunsk and Jennifer Stromer-Galley</i> • Canadian Federal Election and Hashtags That Do Not Belong <i>Thomas Magelinski, Mihovil Bartulovic and Kathleen M. Carley</i> • The devil is in the details: Studying the Influence and Content Diffusion Dynamics of Social Bots During 2014 Italian Mayoral Elections <i>Pujan Paudel and Andrew Sung</i> 	<p>DARPA Ground Truth Performance and Evaluation <i>Moderator: Ariel M. Greenberg, Ariel M. or Asmeret Naugle</i></p> <ul style="list-style-type: none"> • Reminder of team roles and missions <i>Adam Russell</i> • Research teams <ul style="list-style-type: none"> ○ (A) James Evans ○ (B) Aurora C. Schmidt ○ (IV&V, Ed) Svitlana Volkova (EGDS) • Evaluation and results analysis <ul style="list-style-type: none"> ○ (T&E, Ed) Asmeret Naugle • Discussion and lessons learned
<p>LUNCH BREAK</p>			
<p>12:20pm – 1:20pm</p>	<p>Group Detection Moderators: Ninareh Mehrabi, Pegah Hozhabrierdi, and Lynnette Hui Xian Ng</p> <ul style="list-style-type: none"> • Twitter Community Detection Using Principles of Dynamic Social Impact Theory <i>Benjamin Mitchell, Partha Mukherjee and Youakim Badr</i> • Community based Discussion Detection on Code Switched Social Media Content <i>Prarthana Padia, Lucia Falzon, Aaron Harwood, Shanika Karunasekera and Michelle Vanni</i> • Group Formation Theory at Multiple Scales <i>Casey Doyle, Asmeret Naugle, Michael Bernard, Kiran Lakkaraju, Robert Kittinger, Matthew Sweitzer and Fred Rothganger</i> • Bot Impacts on Public Sentiment and Community Structures: Comparative Analysis of Three Elections in the Asia-Pacific <i>Joshua Uyheng and Kathleen M. Carley</i> 	<p>Political Influence 2 Moderators: Ibrahim Rahhal, Catherine King, and Aman Tyagi</p> <ul style="list-style-type: none"> • Data Collection and Sensemaking from Telegram: A Case Study of Ukrainian Political Leaders Channels and Chat Groups <i>Tuja Khaund, Mainuddin Shaik and Nitin Agarwal</i> • A Structural Approach for Classifying Russian Social Media Narratives in the Baltic Region <i>Timur Chabuk, Adam Jonas and Sue Kase</i> • Social Network Analysis of Gobekli Tepe: Belief Propagation in 10th Millennium BC <i>Niloofer Bagheri-Jebelli and William Kennedy</i> • The Russian Strategy for Interference and Influence on Reddit: An Analysis of Infiltrating New Social Media Platforms <i>Christine Sowa and Kathleen Carley</i> 	<p>Government Session</p>

2:50pm – 3:00pm

BREAK

3:00pm – 4:30pm

Keynote: Barry G. Silverman, PhD
Professor Emeritus, Electrical and Systems Engineering, University of Pennsylvania

4:30pm – 7:30pm

Virtual Reception; Posters, Challenge Voting

Tuesday October 20, 2020 – Conference Day 2

Time	Session 1	Session 2	Session 3
8:45am – 9:00am	Welcome	Welcome	
9:00am – 10:30am	<p>Textual Analysis Moderators: Hanin Alhaddad, Mainuddin Shaik, and Muhammad Nihal Hussain</p> <ul style="list-style-type: none"> Artifacts of Crisis: Textual Analysis of Euromaidan <i>Thomas Magelinski, Zachary Stine, Thomas Marcoux, Nitin Agarwal and Kathleen M. Carley</i> MDR Cluster-Debias: A Nonlinear Word Embedding Debiasing Pipeline <i>Yuhao Du and Kenneth Joseph</i> Experiments with One-Class SVM and Word Embeddings for Document Classification <i>Jingnan Bi, Hyoungah Kim and Vito D'Orazio</i> Understanding Colonial Legacy and Environmental Issues in Senegal through Language Use <i>Kamwoo Lee, Jeanine Braithwaite and Michel Atchikpa</i> 	<p>COVID 0 Knight Centers and Covid-19</p> <ul style="list-style-type: none"> Talk 1: Intro to Special Session - Dr. Kathleen M. Carley Talk 2: David Broniatowski & Nicolas Velasquez - COVID 19: hate speech, civil liberties, and political mobilization on digital platforms Talk 3: Zeve Sanderson - The Truth About Fake News: Measuring Vulnerability to Fake News Online During COVID-19 Talk 4: Kathleen M. Carley: The Disinformation Playground 	
10:30am – 11:00am	BREAK		
11:00am – 12:30pm	<p>Government Sponsor Panel Panelists: Laurie Fenstermacher AFRL Edward Palazzolo ARO Rebecca Goolsby ONR Brian Kettler DARPA Dan Cosley NSF Paul Tandy DTRA Kathleen Larson AFOSR</p>	<p>COVID 1 Moderators: Shashank Uttrani, Thomas Magelinski, and Joshua Uyheng</p> <ul style="list-style-type: none"> Non-Pharmaceutical Herd Immunity using Homemade Masks <i>Dale Brearcliffe</i> Preliminary Evaluation of Global Mass Gatherings Suspension in Saudi Arabia during the COVID-19 Pandemic <i>Sultanah Alshammari, Waleed Almutiry, Harsha Gwalani and Saeed Algarni</i> The Ebb and Flow of the COVID-19 Misinformation Themes <i>Thomas Marcoux, Esther Mead and Nitin Agarwal</i> The Coronavirus is a Bioweapon: Analysing Coronavirus Fact-Checked Stories <i>Lynnette Ng and Kathleen Carley</i> 	<p>Graduate Consortium</p>
12:30pm – 2:00pm	LUNCH BREAK		Mentor Lunch

<p>2:00pm – 3:30pm</p>	<p>Human Modeling 2 Moderators: Mainuddin Shaik, Tuja Khaund, and Esther Mead</p> <ul style="list-style-type: none"> Learning Behavioral Representations from Wearable Sensors <i>Nazgol Tavabi, Homa Hosseinmardi, Jennifer Villatte, Andres Abeliuk, Shrikanth Narayanan, Emilio Ferrara and Kristina Lerman</i> Predicting Cognitive Control in Older Adults using Deep Learning and EEG Data <i>Alina Vereshchaka, Fan Yang, Abhijit Suresh, Ibrahim L. Olokodana and Wen Dong</i> Predicting Student Flight Performance with Multimodal Features <i>Zerong Xi, Olivia Newton, Greg McGowin, Gita Sukthankar, Steve Fiore and Kevin Oden</i> Modeling decisions from experience among frequent and infrequent switchers via strategy-based and instance-based models <i>Neha Sharma and Varun Dutt</i> 	<p>COVID 2 Moderators: Daniele Bellutta, Catherine King, and Ibrahim Rahhal</p> <ul style="list-style-type: none"> Cultural Convergence: Insights into the behavior of misinformation networks on Twitter <i>Liz McQuillan, Erin McAweeney, Alicia Bargar and Alexander Ruch</i> Investigating dynamics of COVID-19 spread and containment with agent-based modeling <i>Amirarsalan Rajabi, Alexander Mantzaris, Ece Mutlu and Ivan Garibay</i> A Context-Aware Social Distancing Nudge for Public Health in Response to COVID-19 Pandemic <i>Shuyuan Mary Ho, Md Shamim Seraj, Kevin Yee, Xiamen Liu and Gordon Erlebacher</i> Modeling, Estimating, and Minimizing Average New Infections of COVID-19 Based on Information Theory and Social Networks <i>Hussein Al-Hamdani, Mustafa Alassad, Nitin Agarwal and Seshadri Mohan</i> 	<p>Graduate Consortium</p>
<p>3:30pm – 4:00pm</p>	<p style="text-align: center;">BREAK</p>		
<p>4:00pm – 5:30pm</p>	<p>Agent Modeling 2 Moderators: Daniele Bellutta, Christine Sowa, and Catherine King</p> <ul style="list-style-type: none"> Utilizing Python for Agent-based Modeling: The Mesa Framework <i>Jacqueline Kazil, David Masad and Andrew Crooks</i> Effects of Assortativity on Consensus Formation with Heterogeneous Agents <i>Ece Mutlu and Ivan Garibay</i> The Grey Spot of Twitter Bot Moderation: Studying the traits of accounts who survived amongst the batch of suspended accounts <i>Pujan Paudel and Andrew Sung</i> Multi-cause Discrimination Analysis Using Potential Outcomes <i>Wen Huang, Yongkai Wu and Xintao Wu</i> 	<p>COVID 3 Moderators: Aman Tyagi, Shahan Ali Memon, and Yigeng Zhang</p> <ul style="list-style-type: none"> Medical Literature Mining and Retrieval in a Conversational Setting <i>Souvik Das, Sougata Saha and Rohini Srihari</i> Analytical Study of the Non-pharmaceutical Public Health Interventions to Control the Novel Coronavirus Disease 2019 (COVID-19) <i>Aseel Addawood, Sultanah Alshammari, Amal Alqahtani and Amal Almansour</i> Modeling the Absence of Framing Effect among Indian and US populations in an Experience-based COVID-19 Disease Problem <i>Shashank Uttrani, Neha Sharma and Varun Dutt</i> 	

Wednesday October 21, 2020 – Conference Day 3

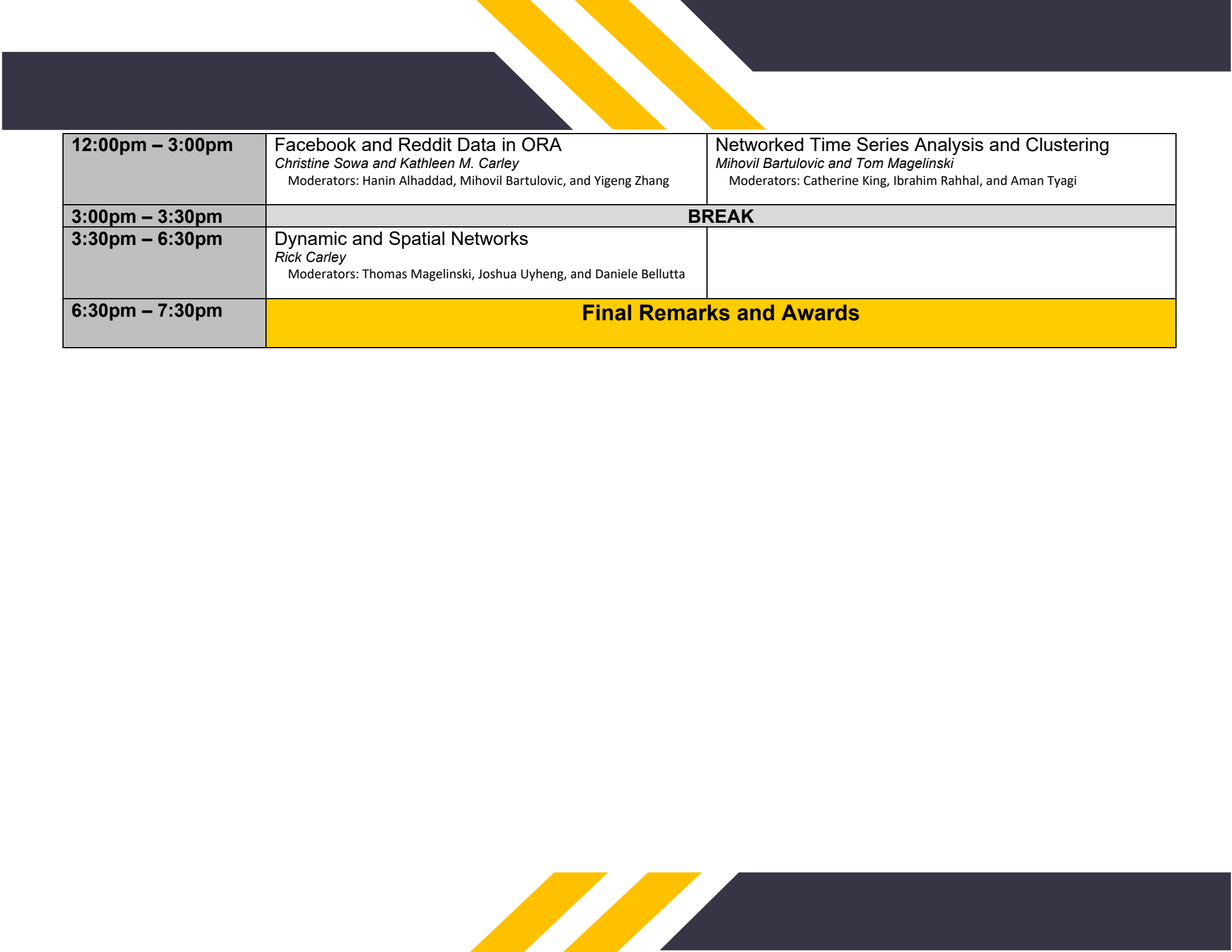
Time	Session 1	Session 2	Session 3
8:45am – 9:00am	Welcome	Welcome	
9:00am – 10:30am	<p>Information Operation Moderators: Ramon Villa-Cox, Uzoamaka Ezeakunne and Pegah Hozhabrierdi</p> <ul style="list-style-type: none"> Identifying Influencers by Countries in Twittersphere <i>Rong Pan, Guanqi Fang and Aleksey Panasyuk</i> Strategic Information Operation in YouTube: The case of White Helmets <i>Nazim Choudhury, Kin Wai NG and Adriana Iamnitshi</i> Optimizing Attention-Aware Opinion Seeding Strategies <i>Charles Martin, Dana Warmesley and Samuel Johnson</i> On Countering Disinformation With Caution: Effective Inoculation Strategies and Others That Backfire Into Community Hyper-Polarization <i>Amirarsalan Rajabi, Chathika Gunaratne, Alexander V. Mantzaris and Ivan Garibay</i> 	<p>COVID 4 Moderators: Mihovil Bartulovic, Talha Oz, and Adewale Obadimu</p> <ul style="list-style-type: none"> Cognitive Modeling for Computational Epidemiology <i>Peter Pirolli, Archana Bhatia, Konstantinos Mitsopoulos, Christian Lebiere and Mark Orr</i> Modeling Protester Orchestration through Connective Action: A COVID-19 Lockdown Protest Case Study <i>Billy Spann, Nitin Agarwal, Oluwaseun Johnson and Esther Mead</i> Systems Thinking and Modeling in Social Networks: A Case Study of Coronavirus Conspiracy Theories Challenges in Twitter network <i>Mustafa Alassad, Muhammad Nihal Hussain and Nitin Agarwal</i> 	
10:30am – 10:50am	BREAK		
10:50am – 12:20pm	<p>Health Moderators: Shashank Uttrani, Thomas Magelinski, and Joshua Uyheng</p> <ul style="list-style-type: none"> Characterizing Sociolinguistic Variation in the Competing Vaccination Communities <i>Shahan Ali Memon, Aman Tyagi, David R. Mortensen and Kathleen M. Carley</i> Critical spatial clusters for vaccine preventable diseases <i>Jose Cadena, Achla Marathe and Anil Kumar Vullikanti</i> Deploying System Dynamics Models for Disease Surveillance in the Philippines <i>Joshua Uyheng, Christian E. Pulmano and Ma. Regina Justina Estuar</i> The Rise and Fall of Humanitarian Citizen Initiatives: A simulation-based approach <i>Erika Frydenlund, Jose Padilla, Hanne Haaland and Hege Wallevik</i> 	<p>COVID 5 Moderators: Mustafa Alassad, Mainuddin Shaik, and Esther Mead</p> <ul style="list-style-type: none"> Exploring the Impact of Mandatory Remote Work during the COVID-19 Pandemic <i>Talha Oz and Andrew Crooks</i> Network-Based Analysis of Early Pandemic Mitigation Strategies, Solutions, and Future Directions <i>Pegah Hozhabrierdi, Raymond Zhu, Maduakolam Onyewu and Sucheta Soundarajan</i> Utilizing Topic Modeling and Social Network Analysis to Identify and Regulate Toxic COVID-19 Behaviors on YouTube <i>Adewale Obadimu, Esther Mead, Tuja Khaund, Maryetta Morris and Nitin Agarwal</i> 	

12:20pm – 1:20pm	LUNCH BREAK		Business Meeting (invite only-private zoom line)
1:20pm – 2:50pm	<p>Textual Analysis 2 Moderators: Zachary Stine, Hanin Alhaddad, and Uzoamaka Ezeakunne</p> <ul style="list-style-type: none"> Beyond Words: Comparing Structure, Emoji Use, and Consistency Across Social Media Posts <i>Melanie Swartz, Andrew Crooks and Arie Croitoru</i> Towards Understanding how Emojis Express Solidarity In Crisis Events <i>Samira Shaikh, Sashank Santhanam, Vidhushini Srinivasan and Khyati Mahajan</i> Birds of a Feather Flock Together: Satirical News Detection via Language Model Differentiation <i>Yigeng Zhang, Fan Yang, Yifan Zhang, Eduard Dragut and Arjun Mukherjee</i> Sentiment and Retweet Analysis of User Response for Early Fake News Detection <i>Uzoamaka Ezeakunne, Shuyuan Mary Ho and Xiuwen Liu</i> Analyzing Moroccan Employment Stakeholder perceptions using Social Network Analysis & Text Analysis <i>Ibrahim Rahhal, Ghita Mezzour, Kathleen Carley and Ismail Kassou</i> 	<p>Amplifying Messages Moderators: Tuja Khaund, Zachary Stine, and Thomas Marcoux</p> <ul style="list-style-type: none"> Developing Graph Theoretic Techniques to Identify Amplification and Coordination Activities of Influential Sets of Users <i>Mustafa Alassad, Muhammad Nihal Hussain and Nitin Agarwal</i> Detecting Online Hate Speech: Approaches Using Weak Supervision and Network Embedding Models <i>Michael Ridenhour, Arunkumar Bagavathi, Elaheh Raisi and Siddharth Krishnan</i> Twitter is the Megaphone of Cross-Platform Messaging on the White Helmets <i>Sameera Horawalavithana, Kin Wai Ng and Adriana Iamnitchi</i> Developing an Epidemiological Model to study Spread of Toxicity on YouTube <i>Adewale Obadimu, Esther Mead, Maryam Maleki and Nitin Agarwal</i> 	

Thursday October 22, 2020 - Tutorials and Closing

****Registered Participants will be emailed a link from their instructors on how to connect.**

Time	Session 1	Session 2
8:30am – 11:30am	<p>High Dimensional Network Analysis <i>Jeff Reminga and Kathleen M. Carley</i> Moderators: Uzoamaka Ezeakunne, Ramon Villa-Cox, and Pegah Hozhabrierdi</p>	<p>YouTube Data Analytics: Revealing Computational Propaganda Techniques and Tactics <i>Nitin Agarwal, Muhammad Nihal Hussain, Thomas Marcoux, and Joseph Kready</i> Moderators: Ninareh Mehrabi, Lynnette Hui Xian Ng, and Shashank Uttrani</p>
11:30am – 12:00pm	BREAK	



12:00pm – 3:00pm	Facebook and Reddit Data in ORA <i>Christine Sowa and Kathleen M. Carley</i> Moderators: Hanin Alhaddad, Mihovil Bartulovic, and Yigeng Zhang	Networked Time Series Analysis and Clustering <i>Mihovil Bartulovic and Tom Magelinski</i> Moderators: Catherine King, Ibrahim Rahhal, and Aman Tyagi
3:00pm – 3:30pm	BREAK	
3:30pm – 6:30pm	Dynamic and Spatial Networks <i>Rick Carley</i> Moderators: Thomas Magelinski, Joshua Uyheng, and Daniele Bellutta	
6:30pm – 7:30pm	Final Remarks and Awards	