

2024 Trust & Influence Program Review

Dr. Laura Steckman | August 12-16, 2024 | Dayton, OH -hybrid

Sinclair Conference Center
444 W Third Street | Dayton, OH 45402

Agenda Day 1 | Monday, August 12, 2024

Time	Topic	Speaker
7:30	In-person check-in/Zoom login	
8:00	Introduction	Laura Steckman, AFOSR
8:15	(Minerva) Climate Change, Demographic Shifts, and Socio-Political Stability in Sub-Saharan Africa	Arun Agrawal, University of Michigan
8:25	(YIP) Towards Robots that Reason About Fairness: Effects on Trust (PI Marynel Vázquez)	Houston Claire, Yale University
8:35	(YIP) A Psychophysiological and Behavioral Measure-Based Multimodal Trust Model for Generating Real-Time Intervention to Facilitate Human-Robot Teaming	Tariq Iqbal, University of Virginia
8:45		
8:55	Mind-Blind Morality: A Route to Trust in High-Stakes Condition	Daniel Fessler, University of California, Los Angeles
9:05	KEYNOTE: Building responsible and trustworthy AI: Operationalizing Responsible Artificial Intelligence (RAI) Practice	Samuel Segun, African Observatory on Responsible Artificial Intelligence
10:05	A Deep Look into Trust and Mutual Understanding in Multi-Agent Cooperative Game Through Explainable Reinforcement Learning	Qinru Qiu, Syracuse University
10:15	(Minerva) Future Fish Wars: Chasing Ocean Ecosystem Wealth	James Watson, Oregon State University
10:25	BREAK	
10:35	Trust your agents: mixed human-machine cooperation based on model-based, hierarchical and communication-augmented Reinforcement Learning (PI Luca Iocchi)	Andrea Fanti, Università Degli Studi Di Roma La Sapienza
11:05	(YIP) Adaptive Conventions for Trustworthy Human-Robot Interaction	Dorsa Sadigh, Stanford University
11:35	A cognitive modeling approach for understanding computational intelligence-human interactions in uncertain and complex decision-making environments: The Impact of Artificial Intelligent	Edmundo Molina Pérez, Tecnológico de Monterrey
12:05	LUNCH	

13:15	(YIP) Understanding Influence Using Personality-Driven Profiles and Prevention (IP3)	Neil Shortland, University of Massachusetts Lowell
13:45	Metrics And Models for Real Time Inference and Prediction of Trust in Human-Autonomy Teaming	Zhaodan Kong, University of California, Davis
14:15	(Minerva) Deterrence In Space—Integrated or Entangled? A Wargaming Approach to Multidomain Strategy	Mariel Borowitz, Georgia Tech
14:45	(Minerva) Integrated Deterrence: Episodic Analysis	Eli Berman, University of California, San Diego
14:55	BREAK	
15:25	(Minerva) Identifying And Measuring User and Platform Vulnerabilities to Strategic Information Operations	Brian Ekdale, University of Iowa
15:55	(Minerva) The Ethics of Warfighter Participation in the Development and Testing of AI-Driven Performance Enhancements	Nicholas Evans, University of Massachusetts Lowell
16:25	Evaluating tRust weaRing Off in Robots	Silvia Rossi, Universita' Degli Studi Di Napoli Federico II
16:55		
17:00	MEETING ADJOURN	

Agenda Day 2 Tuesday, August 13, 2024		
Time	Topic	Speaker
7:30	In-person check-in/Zoom login	
8:00	The Spread of Trust and Distrust in Distributed Human-Autonomy Teaming Constellations	Nathan McNeese, Clemson University
8:30	(Minerva) Food Fight: War Narratives and Identity Reproduction in Evolving Conflicts	Hanna Kassab, East Carolina University
9:00	Robot Compromise	Gerald Matthews, George Mason University
9:30	Trustworthy Ad Hoc Teamwork	Jose Sardinha, Instituto de Engenharia de Sistemas e Computadores - Investigação e Desenvolvimento, Lisboa
10:00	(Minerva) Total War: Multi-Agent Network Theory of Connective Action in A Cross-Domain Coupled World	Neil Johnson, George Washington University

10:30	BREAK	
10:40	Learning And Evaluating Explicit Norms in Human-Machine Teaming Contexts and Their Impact on Human Trust	Matthias Scheutz, Tufts University
11:10	(Minerva) Growing Chinese Economic Power and The Exacerbating Effects of U.S. Economic Interdependence	Shade Shutters, Arizona State University
11:20	Campan: A Novel Human-AI Collaborative Framework for Multi-Perspective Narrative Analytics and Braiding at Scale	Shade Shutters, Arizona State University
11:30	(Minerva) What's Missing? Innovating Interdisciplinary Methods for Hard-To-Reach Environments	Erika Frydenlund, Old Dominion University, with Melissa Miller-Felton (Old Dominion University, Graduate Program in International Studies) and Himarsha Jayanetti (ODU, Department of Computer Science)
12:00	LUNCH	
13:10	Human & Intelligent-Agent Trust for Ethical and Effective Teaming	Chad Tossell, US Air Force Academy
13:40	(YIP) Towards The Characterization of Communicative, Behavioral, And Physiological Signals During Team Facilitation Events to Support Human-Machine Teaming (PI Jessica Menold)	CJ Witherell, Pennsylvania State University
14:10	(Minerva) Cultural Transformations in Response to Different Climate Shocks and Hazards	Eric Jones, University of Texas Health Science Center at Houston
14:40	(Minerva) Comparing Underlying Drivers of South-North Migration in Central America and West Africa (PI Alex De Sherbinin)	Fabien Cottier, Columbia University
14:50	BREAK	
15:00	(Minerva) Understanding Individual and Team Cognition in Support of Future Space Missions	Stephen Fiore, University of Central Florida
15:30	Developing A Qualification System for Robot Moral Agency	Elizabeth Phillips, George Mason University
16:00	Case Studies on the OODA Loop as Applied to Chinese Kinetic and Information Warfare	Claire Holmes, ARLIS/Carleton College and Cody Buntain, ARLIS (co-author M. Owen White, ARLIS/Texas A&M University)
16:30	(YIP) U.S. Influence in The Western Pacific: Legacy of Historical Airstrikes on Anti-American Sentiment	Erin Lin, Ohio State University
17:00	MEETING ADJOURN	

Agenda Day 3 Wednesday, August 14, 2024		
Time	Topic	Speaker
7:30	In-person check-in/Zoom login	
8:00	(Minerva) The Cultural, Economic, And Institutional Determinants of AI Infrastructures and Their Consequences in Global Contexts	JP Singh, George Mason University
8:30	(Minerva DECUR) AI Design Across Cultures: Cognitive Linguistics Describes Ethical Implications (PI Maryann Christison, University of Utah	Scott Jarvis, Northern Arizona University
9:00	Factors Influencing Trust in Technology	Sónia Cláudia Da Costa Sousa, Tallinna Ulikool
9:30	Considerations Of Ethical and Unethical Behavior on Trust in Human-Autonomy Teaming	Nathan McNeese, Clemson University
10:00	(Minerva DECUR) Understanding Multi-Stakeholder Regime Formation: The Case of Cislunar Space	Mariel Borowitz, Georgia Tech
10:30	BREAK	
10:40	KEYNOTE:	Lt Col Jason Hasbrouck, Headquarters Air Force
11:40	The Role of Structural Language Adaptation in Human-Machine Team Performance	Sarah Bibyk, AFRL/711 HPW
12:10	Enabling Re-configurable Multi-Operator Multi-Agent (MOMA) Teams: A Trust Inference and Propagation (TIP) Approac	X. Jessie Yang, University of Michigan
12:40	Investigating The Role of Culture-Specific Honor Values in Shaping Trust and Influencing Group Dynamics in The Middle East	Morteza Dehghani, University of Southern California
13:10	LUNCH	
14:20	(MURI) Cognitive Security and Its Mitigation: A Theoretical Framework, Supporting Neurophysiological Studies, And Interactive Deep Learning Models in Sparse and Dense Information Environments	Leanne Hirshfield, University of Colorado
14:50	(Minerva) Cross-Cultural Multilevel Examination of Power and Influence	Jasmin Cloutier, University of Delaware
15:20	(Minerva) Resurgent Powers, Nontraditional Threats, And Emerging Technologies: Deterrence in A Multilevel Network Framework	Brandon Kinne, University of California, Davis
15:50	BREAK	
16:00	Learning And Evaluating Explicit Norms in Human-Machine Teaming Contexts and Their Impact on Human Trust	Matthias Scheutz, Tufts University

16:30	(Minerva) Global Security Program: Contested Cross-Border Spaces, Illicit Flows, And Order in The Contemporary World (PI Annette Idler)	Katerina Tkacova, University of Oxford
17:00	MEETING ADJOURN	

Agenda Day 4 Thursday, August 15, 2024		
Time	Topic	Speaker
7:30	In-person check-in/Zoom login	
8:00	(Minerva) Fundamental Dynamics, Predictability, and Uncertainty of Scientific Discovery & Advance	Dashun Wang, Northwestern University
8:30	Simulating Arnab Jhala, North Carolina State University Influence Based on Real-World Geographic Data: Emergent Narratives and Interactive Hypothesis Testing	Arnab Jhala, North Carolina State University
9:00	Purpose, Process, And Performance: Evaluating Trustworthiness in Machine Learning/Artificial Intelligence (PI Gene Alarcon)	August Capiola, AFRL/711 HPW
9:30	Human-Machine Sensory Sharing for Swift Trust in Autonomy	Eric Du, University of Florida
10:00	BREAK	
10:10	Modeling And Calibrating Trusted Interactions Between a Human Agent and AI System: A Combined Quantum-Cognitive and EEG Based Approach	Peter Bruza, Queensland University of Technology
10:40	The Effects of West African Historical Time on Socio-Political Behavior	Douglas Leonard, US Air Force Academy
11:10	(Minerva) Algorithmic Personalization and Online Radicalization: A Mixed Methods Approach	Brian Ekdale, University of Iowa
11:40	(Minerva DECUR) Strategic Competition in Cyberspace: Measuring the Effects of Cyber Campaigning Through Experimental Methodology	Richard Harknett, University of Cincinnati
12:10	LUNCH	
13:20	(Minerva) Complex Linkages, Ambivalent Ties: Global Security and Economic Interdependence in the 21st Century	Erik Gartzke, University of California, San Diego
13:50	(Minerva) Climate Change and Alternative Governance	Kathleen Cunningham, University of Maryland, College Park

14:20	(Minerva) Social and institutional determinants of vulnerability and resilience to climate hazards in the African Sahel	Leonardo Villalon, University of Florida
14:50	BREAK	
15:00	A Network Theory of Credence	Yu-Ru Lin, University of Pittsburgh
15:30	Positively Influencing Attitudes and Behaviors Through Social Media Messaging (PI Kathleen Larson)	Megan Morris and Christine Vitiello, AFRL/711 HPW
16:00	Moral Justification to Foster Human-Machine Trust	Elizabeth Phillips, George Mason University
16:30	(Minerva) Science Genome: A Scholarly Graph Embedding Framework to Uncover the Fundamental Dynamics of Scientific Enterprise	Yong-Yeol Ahn, Indiana University
17:00	MEETING ADJOURN	

Agenda Day 5 Friday, August 16, 2024		
Time	Topic	Speaker
7:30	In-person check-in/Zoom login	
8:00	(Minerva) Post-Conflict Security Structures and Citizen Buy-In	Aila Matanock, University of California, Berkeley
8:30	(MURI) Learning Dynamics and Detecting Causal Pathways in Coupled Online-Offline Systems	Jeff Brantingham, University of California, Los Angeles
9:00	Automatic Detection and Analysis of Extremist Video Content on Social Media Using Text, Speech, And Visual Features	Julia Hirschberg, Columbia University
9:30	(Minerva) Computational Kremlinology: Analyzing The Dynamics of Authoritarian Regime Elites Using Networks Constructed from Images and Text	Michael Gabbay, University of Washington
10:00	BREAK	
10:10	Long And De-Stabilizing Shadows: The Identity Shaping Power of Media Systems and Their Impact on Global Security	Anthony Lemieux, Georgia State University
10:40	(Minerva) Climate Change Migration: Implications for Homeland Security	Arie Kruglanski, University of Maryland, College Park
11:10	Trust In Machine Agents Under Realistic Threat	Colin Holbrook, University of California Merced

11:40	Extending Theoretical Trust Modelling: A Field Study of Heterogeneous Human-Machine Teams Operating in Contexts with Real Users, Real Systems, And Real Consequences	Nhut Ho, California State University, Northridge
12:10	LUNCH	
13:20	Computational Modeling of Narrative Representation, Shaping, and Influence	Lu Wang, University of Michigan
13:50	Trust Dynamics In Heterogeneous Human-Agent Teams: Applying Multilevel and Unobtrusive Perspectives	Meredith Carroll, Florida Institute of Technology
14:20	Autonomy-Mediated Trust: Supportive Autonomy for Resolving Disputes and Fostering Relationships in Heterogenous Teams	Jonathan Gratch, University of Southern California
14:50	Building and Exploiting Theory of Mind to Support Trust Calibration in Human-Machine Joint Action	Wenlong Zhang, Arizona State University
15:20	BREAK	
15:30	(Minerva DECUR) Foreign Military Training: Building Effective Armed Forces in Weak States	William Reno, Northwestern University
16:00	(Minerva) The Climate-Food-Urbanization Nexus and The Precursors of Instability in Africa	Katherine Baylis, University of California, Santa Barbara
16:30	(Minerva) The Future of Human Governance: Assessing China's Ambitions to Proliferate AI-Enabled Authoritarianism	Jeannie Johnson, Utah State University
17:00	MEETING ADJOURN	