



Agenda Day 1 | Tuesday, September 7, 2021

Time	Topic	Speaker
8:30-9:00	Zoomgov Login	
9:00	AFOSR Mission	Erik Blasch, AFOSR
9:50	BREAK	
Session: Space Domain Awareness		
10:05	Dynamic Data Driven Framework to Fuse Optical and Passive Radar Data for Enhance Space Awareness	Puneet Singla, PSU
10:30	Dynamic Data Driven Framework to Fuse Optical and Passive Radar Data for Enhance Space Awareness	Ram Narayanan, PSU
10:50	Ground-Based and Space-Based Data Challenge Problem	Francis Chun, USAFA
11:10	Event Characterization Fusing Hard and Soft Data via Semantic Models	John Crassidis, Univ. Of Buffalo
11:30	Development of a Dynamic Data-Driven Uncertainty Quantification Systems	Richard Linares, MIT
11:45	LUNCH	
Session: Multi-Modal Sensor Analysis		
12:30	Dynamic Data Driven Multistatic EO/RF Sensor Fusion	Jia Li, Oakland Univ.
12:50	Dynamic data driven applications systems with multi-modal sensing, collaborative sensing, and deep computing	Jie Wei, City College NY
13:10	On-the-Fly Topological Formation of UAV Swarms	Joe Camp, SMU
13:30	Dynamic Data-Driven Autonomous Planning and Communications	Fatemeh Afghah, Clemson
13:50	Adaptive High Dimensional Data Fusion and Sensing for Dynamic Target Detect	Ruixin Niu, VA Commonwealth Univ.
14:05	BREAK	
Session: ISR Sensor Analysis		

14:20	Mathematical and Algorithmic Challenges for Fully Adaptive Radar	Murali Rangaswamy, AFRL
14:40	Data-Driven Improved Space-Time Adaptive Processing (STAP) Radar	Vahid Tarokh, Duke
15:00	Integrated 5G Imaging and Communication Surveillance as an Edge Service	Yu Chen, Binghamton
15:20	Autonomous Systems and Artificial Intelligence Research in Education	Troy Weingart, USAFA
15:40	Reliable Inference in Dynamic Data Fusion	Peter Willett, UCONN
16:00	BREAK	
Session: State Awareness		
16:15	Generative Adversarial Networks (GANs) for Meaning Making and Translation	Todd Rovito, AFRL/RY
16:35	Unsupervised and Self-Supervised Learning for Image and Video Understanding	Oliver Nina, AFRL/RY
16:55	Non-convex Optimization Algorithms and Theory for Matrix Factorization with Dynamic Massive Data	Laura Balzano, Michigan
17:10	Theory and Efficient Algorithms for Dynamic and Robust L1-norm Analysis of	Panos Markopoulos, RIT
17:30	Data-Driven Adaptive Learning for Video Analytics	Andreas Savakis, RIT
17:50	High-fidelity scene modeling and vehicle tracking using hyperspectral video	Matthew Hoffman, RIT
18:05	BREAK	
18:20	DDDAS Summary	Erik Blasch, AFOSR

2021 Dynamic Data and Information Processing Program Review

Dr. Erik Blasch | September 7-8, 2021 | Virtual

Agenda Day 2 | Wednesday, September 8, 2021

Time	Topic	Speaker
8:35-9:05	Zoomgov Login	
9:05	Status of DDIP/DDDAS	Erik Blasch, AFOSR
9:50	BREAK	
Session: Materials Awareness		
10:05	DataFusion For Multi-Scale Mixed Modality Microstructure Characterization	John Wertz, AFRL/RX
10:50	Intelligent Self-Healing Composite Structure Using Predictive Self-Healing	Sameer Mulani, Univ. Alabama
11:10	Real-time Model Updating for Structures in Shock Environments	Austin Downey, Univ. South Carolina
11:30	Multi-layer Surrogate Modeling via Bayesian Approach and Non-Contract Full-Field Measurements	Zhu, Mao, Univ of Lowell
11:45	LUNCH	
Session - State Awareness		
12:40	Formal Verification of Stochastic State Awareness for Dynamic Data-Driven Intelligent Aerospace Systems	Fotios Kopsaftopoulos, Rensselaer Polytechnic institute
13:00	Active Data- A New Paradigm for Data Streaming Analytics	Carlos Varela, Rensselaer Polytechnic institute
13:20	A Neural-Symbolic approach to Real-time Decision-making in Complex Aerospace Systems	Sarkar Soumik, Iowa State Univ.
Session - Situation Awareness		
13:35	Query-based Activity Estimation and Policy-Based Optimization (QuaePO)	Alexander Aved, AFRL/RIED
13:55	Efficient Learning with Human-in-the-Loop in Structured, Noisy and Temporal	Sriraam Natarajan, UT-Dallas
14:15	Towards Self-Healing Resilient Microgrids Using DDDAS	Jie Xu, George Mason Univ.
14:35	Dynamic-Data-Driven Monitoring for Resilient Smart Grid Networks	Nurcin Celik, Univ. Miami

14:55	BREAK	
Session - Cyber Awareness		
15:10	Towards a Learning-based Dynamic Data Driven Detection Framework for Unforeseen Cyber Attack	Wei Yu, Towson Univ.
15:30	Hardening JADC2 to Adversarial Data: Theory, Algorithms and Applications	Tahir Ekin, Texas State Univ.
15:50	Dynamic Data Driven Explainable Artificial Intelligence For Military Medical Evacuation	Phillip Jenkins, AFIT
16:10	Adversarial Statistical Decision Theory	William Caballero, AFA
16:25	BREAK	
DDDAS/DDIP Summary		
16:40	DDDAS Summary	Erik Blasch, AFOSR