

# Monday, 7 December

1000 – 1030 EST Keynote

Major General Richard C. Staats, Ph.D., Commanding General for the 75th

**Innovation Command** 

"Perspectives of an Old ORSA Soldier"

1030 – 1045 EST Chair Welcome

Mr. Dave Saranchak, ETF Chair

1045 – 1100 EST Junior Analyst Welcome

Dr. Jonell Nicole Samberson, JAA Chair, Sandia National Labs

Dr. David J. Myers, JAA Transitional Chair, Air Force Research Laboratory

	Tutorial Track	Visco Prize Competition
1100 – 1340 EST	Dynamic Network Analytics for Influence Campaign Assessment Tutorial Dr. Kathleen Carley, Carnegie Mellon University	Determination of Influential Factors on Roadway Bridge Sufficiency Using Inspection Data and LASSO: A Proof-of-Concept MAJ Jaison Desai, PhD  Spatio-Temporal Activity Modeling for All Battlespace Domains Mr. Ian Featherstone Forrest Hare Bill Mandrick
		Bandit Algorithms for Data-Driven Resolution/Field-of-View Tradeoffs in Multi- Mode Intelligence Collection Dr. Jefferson Huang Dr. Roberto Szechtman Naval Postgraduate School  Uncertainty Analysis Through Design Threads 1st Lieutenant Jeremiah Bill 2nd Lieutenant Michelle McGee AFIT

#### 1400 – 1500 EST Plenary Speaker

Dr. Robert Bassett, Assistant Professor of Operations Research, Naval Postgraduate School

"New Ways for Adversaries to Disrupt Neural Network Image Classifiers"

1500 – 1650 EST	Tutorial Track	Visco Prize Competition
	Deterministic Modeling with	Tactical Augmented Optimization
	Differential Equations in R	Mr. Vincent Mendoza, Systecon LLC
	and Collaboration with Git	Mr. Bo Coleman, Systecon LLC
	MAJ Dusty Turner	
	Mr. Robert Ward	Last-Mile Supply Chain Resilience Planning
		During Global Pandemics
		Mr. Kyle B. Pfeiffer
		Ms. Carmella Burdi
		Mr. Scott Schlueter
		Argonne National Laboratory

1650 – 1700 EST Break

1700 – 1800 EST Introduction to Bayesian Networks

Dr. Arch Turner

1800 – 1900 EST Junior Analyst Social

## Tuesday, 8 December

1000 – 1030 EST MORS Welcome, ETF Welcome & Visco Prize Award

CAPT Brian Morgan (Retd.), MORS President

Mr. Dave Saranchak, ETF Chair Mr. Norm Reitter, Visco Prize Chair

1030 – 1120 EST Keynote Speaker

Ms. Deborah C. Gordon, Independent Consultant

"Same Storm, Different Boats."

	Tradespace Exploration	AI Embedded Acquisition
1120 – 1200 EST	Uncertainty Analysis Through Design Threads* 1st Lieutenant Jeremiah Bill 2nd Lieutenant Michelle McGee AFIT	Commercial Technologies for Maintenance Activities - Sustainment Technology Transition Accelerator Ms. Debra Lilu, National Center for Manufacturing Sciences Mr. Greg Kilchenstein, Office of the Secretary of Defense
1200 – 1240 EST	Kriging-based Adaptive Sampling for Efficient Response Surface Estimation Dr. Michael Deskevich Dr. Benjamin G. Thengvall Dr. Shane N. Hall OptTek Systems, Inc.	Options to Use Artificial Intelligence (AI) in Assessment of Defense Acquisition Programs Mr. Brian Rieksts Ms. Kristen Guerrera Institute for Defense Analyses

1240 – 1300 EST Partner Exhibits

1300 – 1400 EST Information Warfare Panel Session

Mr. Kevin Gates, President of Information Professionals Association

Dr. Rand Waltzman, Deputy CTO, RAND Corp

Ms. Chris Kubecka, Author, Security Researcher, Speaker, Adviser Invited: Kari Bingen, Former Deputy Under SecDef for USD(I)

1400 – 1500 EST Plenary Speaker

Mr. Harrison Schramm, Group W

Dr. Scott Nestler, University of Notre Dame "Impactful Analysis in the Era of COVID"

	Multi-Domain and Analytics	Advances in Forecasting
1500 – 1540 EST	Spatio-Temporal Activity Modeling for All Battlespace Domains Mr. Ian Featherstone, SAIC Forrest Hare Bill Mandrick	Dynamic and Approximate Dynamic Programming for Future Investment Assessments – Value Iteration and Reinforcement Learning Mr. Matthew Powers
1540 – 1620 EST	Predictive Analytics in the Naval Maritime Domain Dr. Bonnie Worth Johnson, Naval Postgraduate School	
1620 – 1700 EST	Tactical Augmented Optimization* Vincent Mendoza, Systecon LLC Bo Coleman, Systecon LLC	Leveraging Modeling and Simulation Tools to Support Performance Based Logistics Agreements Mr. Ken Rebstock, Systecon LLC

1700 – 1750 EST Plenary Speaker

Dr. Sam Savage, Executive Director, Probability Management

"Chancification: Taking Digital Reasoning Beyond the Flaw of Averages"

1750 – 1800 EST Closing

Mr. Dave Saranchak, ETF Chair

1800 – 1900 EST Birds of a Feather Social

#### Wednesday, 9 December

1000 – 1010 EST Emerging Techniques Forum Welcome

Mr. Dave Saranchak, ETF Chair

1010 – 1130 EST Keynote Speaker

Dr. Daniel J. Ragsdale, Principal Director for Cyber, Office of the Under Secretary

of Defense (Research and Engineering)
"IT and OT Convergence: Caveat Emptor!"

<sup>\*</sup>Denotes Visco prize competitor.

	Human Readiness and Behavior	Predicting Irregular Events
1130 – 1210 EST	Applying the Human Readiness Levels Scale Dr. Judi E See, Sandia National Laboratories	New Adaptive Sampling Techniques to Optimally Augment Complex Simulation Models Dr. James Wisnowski, Adsurgo LLC Dr. Thomas A. Donnelly, SAS Institute Inc Dr. Darryl Ahner, OSD Scientific Test and Analysis Techniques COE Dr. Andrew Karl, Adsurgo, LLC
1210 – 1250 EST	Influence Planning Product (IPP) Dr. Earnest Lloyd Dr. Neil Sanger KBSI	Determination of Influential Factors on Roadway Bridge Sufficiency Using Inspection Data and LASSO: A Proof-of-Concept* MAJ Jaison Desai, PhD, U.S. Army Cyber Command
1250 – 1330 EST	Modeling Effects of Non-Lethal Weapon Selection and Tactical Rules of Engagement on Crowds in Peace Operations Dr. Susan K. Aros, Dr. Anne Marie Baylouny Naval Postgraduate School	Risk Management for Irregular Events - Handling Unknown Unknowns, Black Swans, and Other Rare Hazards Dr. Christian B. Smart, Galorath Federal

1330 – 1400 EST Break & Visit Partner Exhibits

1400 – 1500 EST Plenary Speaker

Dr. Kathleen M. Carley, Carnegie Mellon University "Social Cybersecurity"

	Real Time Intelligence & Information Awareness	Measuring Resilience
1500 – 1540 EST	Space / Solar Power Mr. Shawn Charchan Mr. Harrison Schramm Group W	Topological Data Analysis in Conjunction with Traditional Machine Learning Techniques to Predict Future MDAP PM Ratings Mr. Brian Joseph, OUSD(A&S)
1540 – 1620 EST	Bandit Algorithms for Data- Driven Resolution/Field-of-View Tradeoffs in Multi-Mode Intelligence Collection* Dr. Jefferson Huang Dr. Roberto Szechtman Naval Postgraduate School	Community Resilience Indicator Analysis Mr. John K. Hutchison Ms. Carmella Burdi Ms. Carol Freeman Mr. Kyle B. Pfeiffer Argonne National Laboratory

1620 – 1700 EST Break & Visit Partner Exhibits

1700 – 1750 EST Plenary Speaker

Ms. Christine Cowsert Chapman, Vice President, Asset Management and System Operations at Pacific Gas and Electric Company

Mr. Dave Saranchak, ETF Chair

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## Thursday, 10 December

1000 – 1010 EST Emerging Techniques Forum Welcome

Mr. Dave Saranchak, ETF Chair

1010 – 1100 EST Keynote Speakers

Introduction: Dr. Victoria Coleman, Director, Defense Advanced Research

**Projects Agency** 

Greg Avicola: NOMARS

Mr. Doowan Lee

Andrew Nuss: SeaTrain John Paschewitz: LogX "DARPA Update"

	Multi-Modal Human Stochasticity	Frontiers in Semantic and Blended Prediction  Models
1100 – 1140 EST	Migrant Models Integration Steven Jones, KaDSci, LLC Mr. Michael Resig, Innovative Decisions Inc.	Unleashing insights in unstructured textual data Andrew MacIsaac, Alteryx
1140 – 1220 EST	Visual Analytics for Finance and Human Capital Dr. Amber Sanders, Applied Research Associates, Inc. Dr. Michael R. Hieb, US Department of Homeland Security	Navigating Language Models with Synthetic Agents Dr. Philip Feldman
1220 – 1300 EST	Break & Visit Partner Exhibits	
1300 – 1340 EST	Multimodal Communication for Interactive Military Robots Dr. Sheuli Paul, Defence Research and Development Canada	Advanced Estimating Methodologies for Conceptual Stage Development Mr. Chuck Alexander, JHU-APL

1340 – 1400 EST ETF Chair Closing

Mr. Dave Saranchak, ETF Chair

1500 - 1700 EST Track 4 - Classified

Chair: Ms. Meredith Dozier

Defense Information Systems Agency (DISA) Defense Collaboration System (DCS)