Tuesday, 7 December 2021

Location: **Hilton Alexandria Mark Center, Lobby Level**

0730 - 0830   **Registration & Continental Breakfast**
Magnolia Foyer

0830 - 0900   **Welcome & Visco Announcement**
Mr. David Saranchak, MORS President
Dr. David Azari and Mr. Shaun Doheney, ETF Chairs
Magnolia Room

0900 - 1000   **Keynote Presentation**
Dr. Paul Lopata, Principal Director for Quantum Science, OUSD R&E
Magnolia Room

	Breakout 1 **Accessible AI** *Magnolia Room*	Breakout 2 **Special Topics** *Hickory Room*	Breakout 3 **Advances in Computational Social Science** *Walnut Room*
1010 - 1050	**Do-It-Yourself Artificial Intelligence (DIY-AI) Supporting the DoD and the IC** Dr. Anthony Hoogs	**BrainSTORM: Exploring Artificially Intelligent COA Development in the STORM** Dr. Alec Barker	**Complex Agent Based Simulation for Management of Potentially Hostile Crowds using IFCs** Dr. Susan Aros
1050 - 1130	**Explainable AI (XAI) for Computer Vision – A New Method to Extract a Symbolic Model** Dr. Asim Roy	**Strategic Analytics: The Future of our Military Operations Research Profession** Dr. Greg Parlier	**Multi-View Clustering of Social-Based Data** MAJ Iain Cruickshank, PhD*

*(*Visco Prize Competition Presentations)*

1130 - 1230   **Lunch: Bucket of Icebreakers**
Magnolia Foyer

1230 - 1345   **Panel Discussion: Operations Research and Data Science**
Magnolia Room
- Dr. George Akst, Former Director, Marine Corps Operations Analysis Directorate
- Dr. Nate Bastian, Chief Data Scientist/Senior Research Scientist, ACI
- Mr. Tim Kao, Vice President, Data Science, Center for Naval Analyses
- Mr. Harrison Schramm, Principal Research Scientist, Group W Inc.
- LTC Ross Schuchard, Technical Director, NPS Data Science & Analytics Group
- Mr. Robert Ward, Operations Research Analyst, Operations Analysis Division, Center for Army Analysis

Tuesday Agenda (cont.)

	Breakout 4 **Cyber Critical Infrastructure** *Magnolia Room*	Breakout 5 **Learning and Predicting Complex Behavior** *Hickory Room*	Breakout 6 **Augmented Decision Making** *Walnut Room*
1345 - 1425	**A Periodic Table/Decision System for Information Operations and StratCom** Mr. Alan Kelly	**Augmenting Strategic Decision Making with Deep Reinforcement Learning** Mr. Oscar Martinez*	**Automated Document Exploitation Pipeline** Mr. Richard Kuzma*
1425 - 1505	**Stochastic Bayesian Games for the Cybersecurity of Critical Infrastructures** Mr. Lee Maccarone*	**Human-Machine Teaming, Trust, and Decision Risk for Future AI-enabled Tactical Decision Aids** Dr. Bonnie Worth Johnson	**Coping with Regime Change in Logistics Operations** Dr. Thomas Reed Willemain

1505 - 1520   **Coffee Break and Partner Engagement**
                Magnolia Foyer

1520 - 1600	**Cyber Resilience Integrated Security Inspection System (CRISIS) against False Data Injection Attacks** Dr. Genshe Chen	**Re-Evaluating the Hider-Finder Problem** Ms. Regan Copple*	**Models for Integration of MUSV Into a Carrier/Expeditionary Strike Group** Mr. Brian Wood

*(*Visco Prize Competition Presentations)*

1615 - 1715   **Plenary**
                LtGen Loretta Reynolds, USMC (Ret), Former Deputy Commandant for Information
                Headquarters, U.S. Marine Corps
                Magnolia Room

1715 - 1900   **Opening Reception and Partner Engagement**
                Magnolia Foyer

Wednesday, 8 December 2021

Locations:	**Tutorials - Hilton Alexandria Mark Center, Lobby Level**
	Classified - Systems Planning and Analysis, Inc. (SPA)

0700 - 0800 **Registration & Continental Breakfast**
Magnolia Foyer

0800 - 0900 **Plenary**
Dr. Huseyin Topaloglu *(via Zoom)*
Professor, School of Operations Research and Information Engineering, Cornell Tech
Magnolia Room

0900 - 1000 **Plenary (cont.)**
MG Martin Klein, USAR, Director, DAMO-SO, HQDA DCS G/3/5/7
Magnolia Room

	Tutorials *Hickory Room*	**Breakout 1** **Classified Presentations:** **Systems Planning and Analysis, Inc. (SPA)** *SPA Liberty Room*
1015 - 1200	**Modeling in R and Python** MAJ Dusty Turner and Mr. Robert Ward This tutorial focuses on employing the latest techniques in R and Python to examine real world data. You will learn how to preprocess data, fit models, and validate your results in both R and Python and comparisons between the languages and their major modeling packages.	**1030 - 1100: Opening Remarks & SPA Overview** **1100 - 1140: An Analysis on Critical Factors Influencing AN/SPY-6 Wideband Discrimination** **SECRET NOFORN DISTRO D** Dr. Ruriko Yoshida **1140 - 1220: Mission Planning Wizard for M&S Powered Wargames** **SECRET** Mr. Chris Linhardt
1200 - 1300	**Lunch** *Magnolia Foyer at the Hilton*	**1220 - 1330 Lunch** *SPA Liberty Room*

Wednesday Agenda (cont.)

	Tutorials *Hickory Room*	Breakout 2 Classified Presentations *SPA Liberty Room*
1300 - 1415	**Modeling in R and Python (cont.)** MAJ Dusty Turner and Mr. Robert Ward This tutorial focuses on employing the latest techniques in R and Python to examine real world data. You will learn how to preprocess data, fit models, and validate your results in both R and Python and comparisons between the languages and their major modeling packages.	**1330 - 1410: Contextualizing Army Readiness using Army Vantage: Methods for Developing Timely Visual Decision Support Products** **SECRET NOFORN DISTRO D** CPT Martin Harris **1410 - 1450: Operation Assessments at United States Cyber Command (USCYBERCOM)** **SECRET // REL TO FVEY, DISTRO E** Mr. John Walsh
1415 - 1430	**Break**	**1450 - 1500 Break**
1430 - 1730	**Applying Chancification to Military Readiness** Dr. Sam Savage Participants will learn how to create interactive risk dashboards that perform thousands of Monte Carlo trials per keystroke in native Excel, to create SIP (stochastic) libraries using R, Python or the SIPmath Tools; to post SIP libraries to the internet or intranet; and to create enterprise-wide decision dashboards based on these SIP Libraries.	**1500 - 1540: Tableau and Adversarial AI: Apply Leading-Edge Data Visualization Capabilities to Counter GPS Spoofing in the Maritime Domain** **UNCLASSIFIED DISTRO C** Mr. Gregory Garcia **1540 - 1620: Models for Integration of MUSV Into a Carrier/Expeditionary Strike Group** **UNCLASSIFIED DISTRO B** Mr. Brian Wood **1620 - 1700: Accessible AI and Learning with Less Labeling** **SECRET** Dr. Anthony Hoogs

1730   **No Host Networking Social**
                  Hilton Bar

Thursday, 9 December 2021

Location: **Hilton Alexandria Mark Center, Lobby Level**

0730 - 0830   **Continental Breakfast**
Magnolia Foyer

0830 - 0930   **Plenary**
Dr. Sam Savage, Executive Director, ProbabilityManagement.org
Magnolia Room

	Breakout 7: **Adversarial AI** *Magnolia Room*	Breakout 8: **Network Resiliency** *Hickory Room*	Breakout 9: **Anomaly Detection in Information Operations** *Walnut Room*
0935 - 1030	**Evaluating the Security and Robustness of AI Systems: An Overview of Adversarial AI** Dr. Nate Bastian	**Persistent Network Testing from Design to Retirement with its Digital Twin** Mr. Charles Burdick	**The Influence Platform: Information Operations for the Warfighter** Ms. Lauren Donatucci

1030 - 1045   **Coffee Break and Partner Engagement**
Magnolia Foyer

1045 - 1200   **Plenary**
Brig Gen Andrew Dichter, USAF, (Ret), President & CEO, Group W Inc.
Magnolia Room

1200 - 1300   **Lunch: Rising from the Ashes Roundtable**
Magnolia Foyer

	Breakout 7: **Adversarial AI (cont.)** *Magnolia Room*	Breakout 8: **Network Resiliency (cont.)** *Hickory Room*	Breakout 9: **Anomaly Detection in Information Operations (cont.)** *Walnut Room*
1300 - 1340	**Understanding and Assessing Safety in Artificial Intelligence Systems** Dr. Joshua A. Kroll*	**Process Innovation and Exploration of Army Enterprise IT as a Service Approaches** MAJ Jaison Desai, PhD*	**Modelling of Swarming UAV Swarms in AFSIM** Mr. Joseph Limber

*(*Visco Prize Competition Presentations)*

Thursday Agenda (cont.)

	Breakout 7: **Adversarial AI (cont.)** *Magnolia Room*	Breakout 8: **Network Resiliency (cont.)** *Hickory Room*	Breakout 9: **Anomaly Detection in Information Operations (cont.)** *Walnut Room*
1340 - 1420	**Defending ML Classifiers with Latent Space Declaration** CDR Edgar Jatho, III	**Approximate Dynamic Programming/ Reinforcement Learning: Developing and Testing Alternative Approaches for Finding High Quality USAF Accessions Policies** Maj Joseph Hoecherl	**BrainSTORM: Final Tournament Human vs Centaur Review** Mr. Charles Starkey Mr. Venton Duncan

1420 - 1445   **Coffee Break and Partner Engagement**
Magnolia Foyer

1445 - 1600   **Panel Discussion: Innovation in Practice**
Magnolia Room
- Dr. Anthony Hoogs, Vice President for AI, Kitware
- Dr. Nina Kollars, Associate Professor, Strategic and Operational Research Department, Cyber and Innovation Policy Institute, U.S. Naval War College
- Dr. Kristine Rosfjord, Senior Principal Engineer and Technology Futures Head, The MITRE Corporation
- LTC(P) Natalie Vanatta, Associate Professor / Academy Professor, Emerging Technologies Team Lead, Army Cyber Institute

1600   **Closing Remarks**
Magnolia Room
Dr. David Azari and Mr. Shaun Doheney, ETF Chairs
Mr. David Saranchak, MORS President