BIG DATA FOR INTELLIGENCE

HARNESSING THE POWER OF ADVANCED ANALYTICS TO SUPPORT ENHANCED DECISION MAKING

October 30-31, 2019
Mary M. Gates Learning Center, Alexandria, VA

2019 Speakers Include:

Russell "Russ" Travers
Acting Director
National Counterterrorism Center

Dr. Brian Teeple
CTO and CDO
Department of Homeland Security

Thomas Sasala
Chief Data Officer
US Navy

MajGen Mark Wise, USMC
DCG, MCCDC & ADC, CD&I

October 30, 2019	
8:00—8:45	***Registration and Light Breakfast Reception Open***
8:45—9:00	**Moderator Opening Remarks** **Harry Wingo, Faculty, National Defense University**
9:00— 9:45	**Developing a More Transparent and Efficient Data Strategy for the FBI** • The role of improved data frameworks in reducing the current "data burden" at the Bureau • Collaborating with industry to build and buy tools to improve discovery and analysis of FBI data • Thoughts on the future of data management and analysis at the FBI—how will emerging tools and a shifting threat landscape change the way the Bureau uses big data? **Maria Voreh, Chief Data Officer, FBI (Confirmed)**
9:45—10:30	**Leveraging Big Data to Enable and Empower the Marine** • Overview of how the Marines collect and analyze data and extract actionable intelligence • The role of big data in the future fight—thoughts on how data will help improve situational awareness for the Marines at every level • Data sharing capability improvements, such as mesh network technology, and how this helps improve situational awareness **MajGen Mark Wise, USMC, Deputy Commander, Marine Corps Combat Capability Development Command (Confirmed)**
10:30—10:45	***Networking Break***
10:45—11:30	**Operationalizing Data for the Airman** • Efforts to leverage big data for enhanced data driven decisions • Overview of the Digital Air Force initiative and current status on how the force gathers, uses, and shares data—where is there room for improvement? • Future considerations toward unlocking the power of big data technologies to maximize operational success **Col Charles DeStefani, USAF, Acting Deputy Chief Data Officer, US Air Force (Confirmed)**
11:30—12:15	**Transforming Big Data into an Intelligence Asset** • Building infrastructure and frameworks to enable rapid and safe data sharing across agencies and industry partners • Developing analytical tools that are highly reliable and scalable • Improving supply chain and data security—current challenges and ways to mitigate them **Dean Souleles, Chief Technology Advisor, ODNI (Confirmed)**
12:15-12:45	**Data Virtualization for Modern Data Management and Advanced Analytics** **Speaker TBD, Denodo**
12:45—1:30	***Networking Lunch***
1:30— 2:15	**Improving Data Utilization to Increase Operational Effectiveness at DHS** • Big data collection, storage, analysis, and sharing at DHS—current status and goals to improve these processes in the near and far-term futures • Data integration at DHS—challenges of integrating internal data from different sources as well as integrating DHS data with open source and partner data • Anticipating challenges and benefits of DHS's planned migration to the cloud • Improving data management and access capabilities to reduce silo effect **Dr. Brian Teeple, CTO and CDO, DHS (Confirmed)**

2:15—3:00	**Exploiting Data-Based Intelligence to Counter Terrorist Threats** • Improving NCTC and the broader IC's data collection and analysis methods • Identifying and prioritizing important information and extracting actionable intelligence from swaths of big data—biggest challenges and lessons learned • Thoughts on the future of big data for the NCTC and ways this will change as technology evolves and national security needs shift with the global threat landscape **Russell "Russ" Travers, Acting Director, National Counterterrorism Center (Confirmed)**
3:00—3:30	***Networking Break***
3:30-4:15	**Improving Data-Based Intelligence Analysis and Inter-Agency Cooperation** • Breaking down data silos to improve intelligence sharing between agencies—challenges and ways to mitigate them • Reducing redundancies by moving towards a multi-fabric data environment • Moving from forensic to predictive data analytic models—role of machine learning and AI in producing a better, more useful analytic product **Dr. Ben Apple, Chief Data Scientist and Chief Data Officer, Office of Naval Intelligence (Confirmed)**
4:15-5:00	**Leveraging Cloud Computing at FEMA** • FEMA's transition to the cloud and the development of tools and applications such as OpenFEMA—challenges, such as scalability, and lessons learned • Collaborating with partners in federal government, industry and academia to develop useful tools to better help disaster victims • Looking towards the future: what are FEMA's data-related goals in the near and far-term futures? **Ted Okada, CTO, FEMA (Confirmed)**
5:00	**End of Day One**

October 31, 2019	
8:15—8:45	***Registration and Light Breakfast Reception Open***
8:45—9:00	**Moderator Opening Remarks** **Harry Wingo, Faculty, National Defense University**
9:00—9:45	**Harnessing Data to Improve Efficiency Across the Army** • Delivering solutions to warfighters quickly—the importance of an agile innovation process and examples of how this is done • Maximizing automation to increase efficiency and reduce workflow challenges • Thoughts on the Army's use of big data in the near and far-term future—anticipated challenges and how to mitigate them **Leonel Garciga, Director of Information Management, HQDA-DCS-G2 (Confirmed)**
9:45—10:30	**Ensuring the Navy's Operational Advantage through Data Modernization** • Overview of the current data situation at the Navy and the newly-created position of Navy Chief Data Officer—what are the Navy's most urgent needs, biggest challenges, and top priorities for the near and far-term future? • The role of automation in data management and analysis • Migrating to the cloud—challenges, such as dealing with legacy data and clearing "digital landfills", and how industry can help solve them **Thomas Sasala, Chief Data Officer, US Navy (Confirmed)**
10:30—11:00	***Networking Break***
11:00—12:20	**<u>Panel Discussion:</u> Securing the Cloud: Protecting Cloud-Based Data from Malicious Actors** ***Panelists:*** **Katy Warren, Principal Engineer, MITRE (Confirmed)** **Susie Adams, CTO, Microsoft Federal (Confirmed)** **Brian Conrad, FedRAMP Program Manager for Cybersecurity (Confirmed, pending legal approval)** **Ravi Saraswathi, IBM Chief Architect and Cloud Executive (Confirmed)**
12:20—12:30	**Realizing the Enterprise Data Cloud from Edge to AI** **Travis Ruebelmann, Senior Sales Engineer, Cloudera (Confirmed)**
12:30—1:30	***Networking Lunch***
1:30—2:15	**Managing Information and Intelligence at the Operational Level** • Challenges of providing mission-relevant data to the warfighter in a way that is timely and reliable • Leading Army-wide information and intelligence-sharing services—where is there room for improvement? • Leveraging big data sets and data mining to get actionable intelligence—thoughts on how this will change as technology evolves **Kirk Brustman, Director, US Department of the Army Intelligence Information Services (DAIIS) (Confirmed)**

2:15—3:00	**Driving Data Innovation to Assure Mission Success** • Leveraging big data sets to anticipate threats and enable faster, more informed responses to threats and assure mission success • Building an ecosystem of innovation at the North American Aerospace Defense Command and U.S. Northern Command—how can this encourage rapid, agile data analysis solution development? • Cooperating with partners in industry and academia on data solutions innovation—how can this help NORAD and USNORTHCOM achieve mission success? **Dr. Jeffrey Collins, Chief Technology Innovation Officer, NORAD and USNORTHCOM (Invited)**
3:00—3:30	***Networking Break***
3:30—4:15	**Automating Data Analysis at the National Geospatial Intelligence Agency** • Using computer vision to collect and examine geospatial intelligence—benefits and biggest challenges • Maintaining the operational advantage by understanding adversarial capabilities • Looking towards the future: how will evolutions in AI and machine learning change the way we manage and analyze data? **Todd Myers, Automation Lead CIO-T, National Geospatial Intelligence Agency (Confirmed)**
4:15—5:00	**The Future of Data Science** • Overview of the Johns Hopkins' Data Science program—current research initiatives and research goals in the near and far-term futures • Applying AI and machine learning to data • Partnering with the private and public sectors on research and development—ways to improve **Dr. John Piorkowski, Chair, Information Systems Engineering and Co-Chair, Data Science/Chief AI Architect and Supervisor, Applied Information Sciences Branch, JHU Applied Physics Laboratory (Confirmed)**
5:00	**End of Symposium**