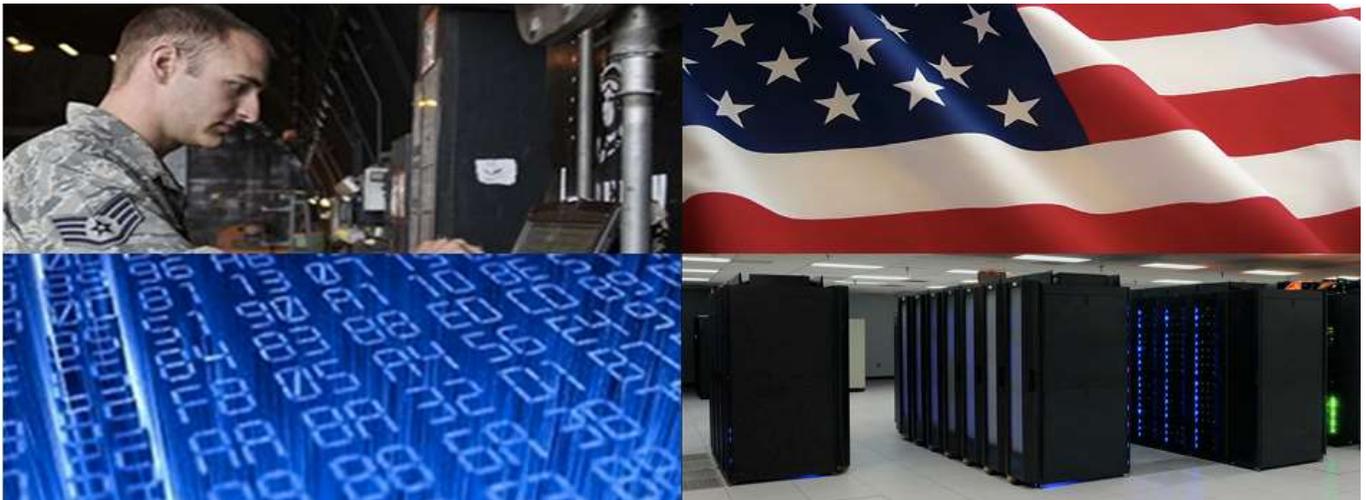




Defense Strategies Institute professional educational forum:

4th Annual Big Data for Intelligence Symposium

~Leveraging the Big Data Opportunity~



November 29-30, 2016: AUSA Conference and Event Center

2425 Wilson Blvd. Arlington, VA 22201

<p>Program Design & Goal:</p>	<p>DSI's 2016 Big Data for Intelligence Symposium provides members within the Intelligence Community the chance to have an open discussion about the challenges and opportunities that exist when seeking to transform large quantities of disparate information into actionable intelligence. This educational forum will provide US military commands, government agencies, academia, and technology providers with the opportunity to explore more effective and efficient ways to leverage the power of big data for intelligence purposes.</p> <p>The goal of this year's forum is to create meaningful progress towards solving some of the complex issues that hinder the government's ability to rapidly process and exploit the potential use of big data within an increasingly congested informational environment.</p>
<p>Operating Guidelines:</p>	<p>DSI's Symposium directly supports IC and DoD priorities by providing a conduit for officials to efficiently reach audiences outside of their respective offices that directly impact their department's mission success, at no charge to the government, and in an efficient expenditure of time.</p> <p>DSI's Symposium will provide a forum to address and improve internal and external initiatives, meet with and hear from partner organizations, disseminate vital capability requirements to industry, increase visibility within the larger community, and generally support their mission.</p> <p>* This Symposium is open and complimentary to all IC, DoD and Federal employees and is considered an educational and training forum.</p> <p>(Industry and academia members are charged a fee of attendance)</p> <p>This Symposium is CLOSED TO PRESS / NO RECORDINGS</p>
<p>General Target Audience:</p>	<p>U.S Military Services, members of the Intelligence Community, Government Agencies, Academia, and U.S. Technology Solution Providers</p>
<p>Specific topics to be discussed include:</p>	<p>Topics included in this discussion:</p> <ul style="list-style-type: none"> - <i>Delivering standardized, innovative, technology-based capabilities to solve big data intelligence challenges</i> - <i>Leveraging the combat cloud to produce a comprehensive picture of the battlespace in real time</i> - <i>Finding innovative ways to utilize existing technology and discover new outcomes for big data</i> - <i>Developing innovative ways to transform big data into actionable intelligence</i> - <i>Developing innovative policies and technological solutions to shape future enterprise systems</i> - <i>Acquiring the technological capabilities to transition into the next immersive phase of intelligence</i> - <i>Finding the most effective ways to maximize the potential uses of big data</i> - <i>Securing advanced tools to better find and synthesize open-source intelligence</i>

Draft Agenda: Invited Speakers are Not Confirmed and are Subject to Change

Tuesday, November 29, 2016

8:00 - 8:45	Registration and Light Breakfast Reception Open
8:45- 9:00	Moderator Opening Remarks
9:00- 9:40	USDI Efforts to Promote Innovative Intelligence Solutions for the Warfighter in the Big-Data Space <ul style="list-style-type: none">- Current investment priorities for the DoD intelligence community- Enhancing situational awareness by transforming raw data into actionable intelligence to support decision-making- Future investment focus areas and R&D efforts for big data analytics and intelligence requirements Dr. Jerry Hill Senior Technical Advisor, Technical Collection and Special Programs OUSD(I) (Confirmed)
9:40 – 10:20	Providing Ways to Rapidly Develop and Deploy Quality, Mission-critical Analytics to Warfighters <ul style="list-style-type: none">- Updates on Navy Tactical Cloud Reference Implementation efforts to enable on-demand access to shared sensors and computing resources- Development of advanced analytics and reasoning capabilities- Costs to creating unique analytics for specific data sources and data relationships.- Challenges to finding affordable capabilities to effectively leverage the promise of big data Nick Andersen CIO Information Warfare, (N2/N6) (Confirmed)
10:20 – 10:40	Networking Break
10:40 – 11:20	Emphasizing Continuous Innovation to Develop New Solutions and Analytical Capabilities <ul style="list-style-type: none">- Empowering the Warfighter through Big Data Analytics- Efforts to rapidly design and develop minimally viable products (MVPs), services, and capabilities that solve user defined problems within the MCISR Enterprise- Producing quality data and identifying definitive cost-saving tools to empower big data analytics- Near-term initiatives for open source intelligence capabilities Jennifer Edgin CTO Marine Corps Intelligence (Confirmed)
11:20-12:00	Leveraging the Combat Cloud to Produce a Comprehensive Picture of the Battlespace in Real Time <ul style="list-style-type: none">- Current Perspectives on forming an Integrated ISR Enterprise- Strengthening partnership and integration efforts between the IC and the operational community- Current initiatives to enhance the Warfighter's ability to access information and coordinate actions across the battlespace Jeff Eggers, SES Chief Technology Officer, DCS for Intelligence, Surveillance and Reconnaissance HQUSAF (Confirmed)

12:00-1:00	Networking Lunch
1:00 – 1:40	<p>Exploiting Big Data and Enhancing Operational Effectiveness through Cloud Analytics</p> <ul style="list-style-type: none"> – Challenges to building a common cloud framework for data, apps and security – Enabling greater intelligence PED capabilities through more innovative, robust, and secure information technology – New priorities and initiatives to further transform Army Intelligence to a Net-Centric, knowledge-based community – Challenges to implementing effective data management methodologies to ensure that data are authoritative, timely, secure and of the highest quality <p>Annette L. Redmond Director, IC Information Management Office of the Deputy Chief of Staff, G2 (Invited)</p>
1:40 – 2:20	<p>Current Efforts to Enhance Big Data and Data Science for Army Intelligence</p> <ul style="list-style-type: none"> – Identifying patterns within already-existing data and building algorithms to make better informed decisions in the future – Utilizing automated tools and cloud analytics to provide greater access and situational awareness to warfighters – Future challenges and opportunities to improve data processing capabilities <p>Dr. Micah Abrams Chief Architect, G7 Integration and Assessment Division INSCOM (Confirmed)</p>
2:20 – 2:50	Networking Breaks
2:50 – 4:00	<p style="text-align: center;">~ Using Big Data and Predictive Analytics to Forecast Future World Events ~</p> <p><i>The international system is becoming increasingly complex and unpredictable, despite the fact that analysts have access to more information than ever before. One of the biggest challenges that the Intelligence Community (IC) will face in the age of Big Data, will not be its ability to collect data, it will be the IC's ability to process and exploit the information collected in a timeframe that allows decision-makers to stay ahead of geopolitical events before they unfold.</i></p> <p><i>Predictive analytics encompasses a variety of different tools and techniques that can be used to improve the IC's ability to forecast major international events such as disease outbreaks, social unrest, foreign policy shifts, or terrorist attacks. Speakers joining us for this year's panel discussion will share their perspectives on future advances in forecasting that can be leveraged to enhance the IC's ability to anticipate events before they occur.</i></p> <p>Moderator:</p> <p>Dr. Carl Hoover Director and Senior Scientist, Defense & Intelligence Elder Research, Inc. (Confirmed)</p> <p>Panelists:</p> <p>Dr. Naren Ramakrishnan Director, Discovery Analytics Center Department of Computer Science, Virginia Tech (Confirmed)</p> <p>Richard Eng Associate Department Head, Applied Software Engineering The MITRE Corporation (Confirmed)</p> <p>Dr. Donald E. Brown Director, Data Science Institute University of Virginia (Confirmed)</p>

4:00 – 4:40	<p>R&D Efforts to Further Develop and Leverage Advanced Technologies for Applications in Future ISR Systems</p> <ul style="list-style-type: none"> – Efforts to enhance sensor data collection and minimize networking gaps – Current challenges associated with the tactical processing of sensor data – Translating raw information into actionable intelligence in a reasonable timeframe – Future Advances in ISR Collection and Processing Capabilities for US Navy <p>Martin Kruger Thrust Manager, Intelligence, Surveillance and Reconnaissance (ISR) Thrust Area Office of Naval Research (Confirmed)</p>
4:40 – 5:20	<p>Strengthening Global Information Fusion Services to Limit Tactical Surprise and Improve Situational Awareness in Complex and Contested Environments</p> <ul style="list-style-type: none"> – Developing innovative methods to exploit the quantitative and qualitative nature of the expanded data available within the tactical environment – Discovering new technology for autonomous systems and real-time data analytics for Soldiers and intelligence analysts – Developing social network analysis techniques to map and measure the relationships and flows between people, groups and organizations within the tactical environment <p>Dr. Raju Namburu Chief, Computational and Information Sciences Directorate US Army Research Lab (Confirmed)</p>
<u>Wednesday, November 30, 2016</u>	
8:15-8:45	<i>Registration and Light Breakfast Reception Open</i>
8:45-9:00	Moderator Opening Remarks
9:00-9:40	<p>The National Intelligence Council's Perspectives on Current IC Capabilities and the Future Threat Environment</p> <ul style="list-style-type: none"> – Challenges to solving intelligence mysteries and taking advantage of the exponential increase in available data in the information environment – Updates on the NIC's Global Trends report – Efforts to identify innovative analytic tradecraft, standards, and tools needed to increase the IC's ability to exploit big data for intelligence purposes – Understanding the current threat environment and identifying key drivers and developments likely to shape future world events <p>Dr. Gregory Treverton Chairman National Intelligence Council (Confirmed)</p>
9:40 – 10:20	<p>Finding Innovative Ways to Leverage the Power of Big Data</p> <ul style="list-style-type: none"> – Challenges to delivering actionable intelligence for the Warfighter – Optimizing IT Infrastructure and strengthening interoperability between enterprise systems – Creating a culture of innovation within the Defense Intelligence Agency and partners in the IC – Near-term efforts to leverage machine learning and automation for faster intelligence collection and analysis <p>James Harris CTO DIA (Confirmed)</p>

10:20 – 10:40	Networking Break
10:40 – 11:20	<p>Acquiring the Capabilities to Transition into the Next Immersive Phase of Intelligence</p> <ul style="list-style-type: none"> – Forming collaborative partnerships to increase innovation – Transforming research and development efforts within NGA – Key research focus areas for NGA – Overview of the seven key focus areas for NGA and the future role of anticipatory analytics and automation <p>Dr. Peter Highnam Director, InnoVision NGA (Confirmed)</p>
11:20 – 12:00	<p>Predictive Analytics, Big Data, and Information Assurance for National Security</p> <ul style="list-style-type: none"> – Providing cryptographic, network, and operational security to protect and defend national security systems – Updates on NSA’s GovCloud and efforts to create a scalable and secure environment for all NSA data – Future big data challenges for the NSA and the role of automated predictive analytics <p>Neal Ziring Technical Director, Information Assurance Directorate NSA (Confirmed)</p>
12:00 – 12:40	<p>Discovering Innovative Technologies Required to Overcome the Complex and Dynamic Challenges Presented by “Big Data</p> <ul style="list-style-type: none"> – Investigating and implementing innovative classified and unclassified solutions for tactical strategic analytic challenges – Updates on partnership efforts between government, industry and academia – Current research focus areas <p>Michael D. Bender Director, Laboratory for Analytical Sciences NC State University (Confirmed)</p>
1:00 – 1:40	Networking Lunch
1:40 – 2:20	<p>Generating Decisions through Big Data</p> <ul style="list-style-type: none"> – The importance of data governance and mitigating risk through responsible policies and procedures – Creating smart data sets to achieve mission-success – Strategies and technological capabilities needed to flatten the data space <p>Ted Okada CTO FEMA (Confirmed)</p>
2:20 – 2:40	<p>Re-imagining Our World Through Data</p> <ul style="list-style-type: none"> – Using big data to forecast future geopolitical unrest – Challenges and lessons learned from building GDELTA, the largest, most comprehensive, and highest resolution open database of human society ever created – Current perspectives on the future of big data and predictive forecasting capabilities <p>Kalev Leetaru Senior Fellow, Center for Cyber & Homeland Security George Washington University (Confirmed)</p>
2:40 – 3:00	Networking Break

3:00 – 3:40	<p>Combining the Benefits of Human and Machine-Driven Forecasting Systems to Improve Geopolitical Predictive Analytics</p> <ul style="list-style-type: none"> – Identifying predictive models that incorporate both machine data and human judgments – Development and testing of methods to optimize human/machine collaboration for the creation of maximally accurate geopolitical and geo-economic forecasts – Current efforts to leverage the strengths of academia and industry through collaborative teaming <p>Dr. Seth Goldstein Program Manager, Hybrid Forecasting Competition IARPA (Confirmed)</p>
3:40 – 4:20	<p>Decision Support Models Used to Leverage Big Data and Increase Efficiency</p> <ul style="list-style-type: none"> – Challenges to leveraging trillions of transportation data records generated each day from mobile devices and smart sensors – Mobility-on-demand and crowd-sourced transportation options to provide real-time data – Current efforts to analyze smart city technologies and near-term perspectives on the future of big data analytics used to increase competitiveness <p>Dr. Lei Zhang & Michael Pack Director, National Transportation Center Director, CATT Laboratory University of Maryland (Confirmed)</p>
4:20	<p>End of Symposium</p>

Draft Agenda: Invited Speakers are Not Confirmed and are Subject to Change