

5th Symposium Examining the Latest  
Challenges and Opportunities in ...

# BIG DATA

— APPLICATIONS AND ANALYTICS —  
FOR DEFENSE, INTELLIGENCE AND HOMELAND SECURITY

**Over 20 Experts from** OASD/R&E, DHS, NSA, DIA, SAF/A9, OUSD-I, ONR, INSCOM, Army G-3/5/7, AFRL, CAA, CIA, DISA, NSF, IBM, Unisys, Booz Allen Hamilton, 2bSecure, Elder Research, and Machine Analytics examine:

- The Latest Government Strategy, Plans, Needs and Initiatives
- Emerging High-Value Missions and Applications
- Flexibility, Scalability and Security Issues and Solutions
- Big Data/Cloud Convergence
- BDA Implementation: Infrastructure Planning, PED Strategies and Techniques and Emerging Lessons Learned

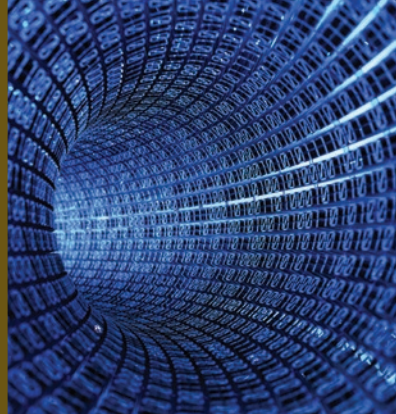
**Special Presentations by**

**DR. REGGIE BROTHERS, SES**

*Deputy Assistant Secretary of Defense for Research, OASD/R&E*

**DR. DANIEL GERSTEIN, SES**

*Under Secretary (Acting), Science and Technology, DHS*



**Washington, DC**  
**March 19-20, 2014**

## ***Big Data for Defense, Intelligence and Homeland Security Operations***

**Defense, intelligence and homeland security professionals have access to an ever-increasing number of sensors, imagers, internet artifacts, open source and other sophisticated collection devices and mechanisms to the point that a major challenge has become how to sift through this massive amount of information to find the most critical and actionable items of intelligence.** Increasingly, this must be accomplished in near-real time and the information must be packaged in a **format capable of being shared with all other pertinent parties.** The result is that sensor, computer and communication technologies are being strained beyond capacity to **keep pace with current and future information management and analysis needs.** **'Big Data' tools, techniques, and technologies seek to provide the means to analyze, exploit and share conclusions drawn from this seemingly overwhelming information load.**

**This outstanding symposium brings together the key government and industry experts who are shaping the direction of big data research and development for defense, intelligence and homeland security.** What are the latest **DoD, Intelligence Community, and Homeland Security needs and initiatives in big data?** How is **big data analytics being applied to ISR, intelligence sharing, GEOINT fusion, video analytics, atmospheric, identity, biometrics,** and a whole range of other critical mission applications? What role are **new tools, techniques, and technologies** – predictive analytics, cloud computing, metadata, etc. – playing in making big data analytics a reality? What are the **future challenges and opportunities? What role(s) can industry play?** These and many other critical questions will be examined during this outstanding two-day event.

### ***Our Distinguished Panel of Experts***

Dr. Reggie Brothers, SES	Deputy Assistant Secretary of Defense for Research, OASD/R&E
Dr. Daniel Gerstein, SES	Under Secretary (Acting), Science and Technology, DHS
Mr. Kevin Magee	Deputy Chief Information Officer, Central Intelligence Agency
Ms. Lisa Shaler-Clark	Deputy Director/Program Manager, Futures, INSCOM, US Army
Mr. Joseph Kelly	Deputy Director, Cyber, OUSD-I
Dr. Mark Gallagher, SES	Technical Director, SAF/A9
Mr. George Duchak	Director, Information Directorate, Rome Research Site, AFRL
Mr. Martin Kruger	Thrust Manager, Intelligence, Surveillance and Reconnaissance, ONR
Mr. Todd Myers	Lead Global Computer Architect, NSA
Colonel Scott Nestler, USA	Chief, Force Strategy Division, Center for Army Analysis
Ms. Cathy Johnston	Senior Data Scientist, Defense Intelligence Agency
Lt. Colonel Bobby Saxon, USA	Division Chief and Program Director, EMDS, G-3/5/7 PO, US Army
Senior Representative	Defense Information Systems Agency
Dr. Rod Fontecilla	Vice President, Application Modernization, Unisys Federal Systems
Mr. Robert Bigman	Chief Executive Officer, 2bSecure
Mr. Joseph Kielman	Science Advisor, Cyber Security, S&T Directorate, DHS
Dr. Fen Zhao	Senior Staff Associate, CISE NSF
Mr. Steve Stennett	Chief Technology Officer, Federal Information Management, IBM
Dr. Subrata Das	Chief Scientist, Machine Analytics
Mr. Brad Medairy	Vice President, Strategic Innovations Group, Booz Allen Hamilton
Mr. Alan Briggs	Data Scientist, Elder Research

# BIG DATA

## Applications and Analytics for Defense, Intelligence and Homeland Security

Washington, DC • March 19-20, 2014

### SYMPOSIUM AGENDA

#### *I. The Latest Government Needs, Initiatives, Opportunities and Challenges*

##### GOVERNMENT KEYNOTES:

###### **"Big Data and the Defense Mission"**

**DR. REGGIE BROTHERS, SES**

*Deputy Assistant Secretary of Defense for Research,  
Office of the Assistant Secretary of Defense for Research and Engineering (OASD/R&E)*

###### **"DHS Perspectives & Initiatives"**

**DR. DANIEL GERSTEIN, SES**

*Under Secretary (Acting), Science and Technology,  
Department of Homeland Security (DHS)*

###### **"CIA Perspectives and Initiatives"**

**MR. KEVIN MAGEE**, *Deputy Chief Information Officer, Central Intelligence Agency (tentative)*

###### **"Big Data Analytics for Army Intel"**

**MS. LISA SHALER-CLARK**, *Deputy Director/Program Manager, Futures, Intelligence and Security Command (INSCOM), US Army*

- Leveraging Big Data Across Our Enterprise
- Partnering on Secure, Sharable Capabilities
- Opportunities and Emerging Lessons

###### **"Commercial Technology and The Defense/Intelligence Missions"**

**MR. JOSEPH KELLY**, *Deputy Director, Cyber, Office of the Under Secretary of Defense for Intelligence (OUSD-I) (tentative)*

###### **"ONR Perspectives and Initiatives"**

**MR. MARTIN KRUGER**, *Thrust Manager, Intelligence, Surveillance and Reconnaissance (ISR), Office of Naval Research (ONR)*

###### **"NSG/NGA Architecture and Big Data"**

**MR. TODD MYERS**, *Lead Global Computer Architect, National Geospatial-Intelligence Agency (NGA)*

### **“DIA Perspectives and Initiatives”**

**MS. CATHY JOHNSTON**, *Senior Data Scientist, Defense Intelligence Agency (DIA)*

### **“DISA Perspectives and Initiatives”**

**SENIOR REPRESENTATIVE**, *Defense Information Systems Agency (DISA)*

### **“AFRL Perspectives and Initiatives”**

**MR. GEORGE DUCHAK**, *Director, Information Directorate, Rome Research Site, Air Force Research Labs (AFRL)*

## ***II. The Latest Tools, Techniques and Technologies – Infrastructure/Architecture Planning, Data Collection/Discovery, Deep/Predictive Analytics, Cloud, Scalability, Security, etc.***

### **“Analytics for Making and Aggregating Risk Assessment”**

**DR. MARK GALLAGHER, SES**, *Technical Director, Studies & Analyses, Assessments and Lessons Learned, US Air Force (SAF/A9)*

### **“Top-Down vs. Bottom-Up Analytics”**

**COLONEL SCOTT NESTLER, USA**, *Chief, Force Strategy Division, Center for Army Analysis (CAA)*

### **“Big Data Analytics and Predictive Analytics”**

**LT. COLONEL BOBBY SAXON, USA**, *Division Chief and Program Director, Enterprise Management Decision Support, G-3/5/7 Program Office, US Army*

### **“A Powerful Analytics Platform to Provide Big Data Analytics as a Service (BDAAA) to Government - Use Cases”**

**DR. ROD FONTECILLA**, *Vice President, Application Modernization, Unisys Federal Systems*

### **“Security in Big Data Analytics”**

**MR. ROBERT BIGMAN**, *Chief Executive Officer, 2BSecure LLC; former Chief Information Security Officer, Central Intelligence Agency*

- Securing the Infrastructure
- Securing Access
- Data Protection
- Audit Logging

**Would you like to be an exhibitor at this symposium?**

**Host a breakfast, lunch or beverage reception during the symposium?**

**Please contact Ken Hood @ 310-320-8128 to find out how your organization can participate.**

### ***III. High-Value Applications for Defense and Intelligence – Emerging Lessons Learned***

#### **“Data Analytics for Homeland Security – Cyber Security Applications in Light of the Recent Executive Order and Presidential Policy Directive”**

**MR. JOSEPH KIELMAN**, *Science Advisor, Cyber Security Division, Science and Technology Directorate, Department of Homeland Security*

#### **“Big Data Analytics and National Security”**

**MR. STEVE STENNETT**, *Chief Technology Officer, Federal Information Management, IBM*

#### **“Data Analytics and the Intelligence Mission”**

**MR. BRAD MEDAIRY**, *Vice President, Strategic Innovations Group, Booz Allen Hamilton*

#### **“From Foundational Research to “Data to Action”: National Science Foundation’s Activities in Big Data”**

**DR. FEN ZHAO**, *Senior Staff Associate, Office of the Assistant Director, Computer and Information Science and Engineering (CISE), National Science Foundation (NSF)*

- Big Data - a Paradigm Shift from Hypothesis-Driven to Data-Driven Discovery
- NSF Big Data Investment Areas and Programs: Foundational Research, Building New Multidisciplinary Research Communities, Education and Workforce, Cyberinfrastructure
- Recent Key NSF Funded Projects, Collaborations, and Workshops in Big Data
- Supporting the Big Data Innovation Ecosystem: Multistakeholder Partnerships to Move Data to Knowledge to Action

#### **“Big Data Analytics and Data-to-Decision”**

**DR. SUBRATA DAS**, *Chief Scientist, Machine Analytics*

- Computational Analytics Foundations of the Data-to-Decision Continuum
- Model-based Predictive and Prescriptive Analytics
- Big Data Analytics in the Cloud
- Querying Distributed Structured and Unstructured Big Data Sources
- Unstructured Text Analytics

#### **“Advanced Data Science and the Intelligence Mission”**

**MR. ALAN BRIGGS**, *Data Scientist, Elder Research*

#### **WHO SHOULD ATTEND**

- DoD, INTEL, and HLS Planners and Acquisition Authorities
- DoD, INTEL, and HLS Senior Program Directors/Managers and Staffs
- DoD, INTEL, and HLS Data Managers and Senior Data Analysts
- Industry Senior Strategy and Business Development Executives
- Industry Senior Program Directors/Managers and Staffs
- Industry Senior Data Management and Big Data SMEs
- Government and Industry Professionals who need to stay abreast of the latest trends and developments in this dynamic growth arena



