

Technical Training Day

Monday, January 25th, 2016

0800 **Registration**

0845 **Chairperson Welcome and Opening Remarks**

0900 **KEYNOTE: Leveraging Technological Innovation to Meet Biometrics and Identity Requirements**

- Requirements for new modalities in authentication
- Advanced Recognition Technology
- The future of biometrics for government and law enforcement

0945 **Morning Networking & Refreshment Break**

1015 **IDENTITY INNOVATION WORKSHOP A: NIEM Biometrics Domain (NBD) Training**

The Biometrics Domain supports information sharing and promotes interoperability between mission-based organizations engaged in activities such as homeland security, national defense, border management and global law enforcement through the joint development and alignment of XML Biometric Standards. In this workshop, we will focus on NBD Standards training to include:

- Overview of current and future biometrics standards
- New developments in standardization and interoperability of biometrics systems
- Examination and demonstration of tools used to search attributes and work with NIEM



Diane Stephens

Chair, NIEM Biometrics Domain

Office of Biometric Identity Management (OBIM), DHS



William Graves

Co-Chair, NIEM Biometrics Domain, Biometrics Engineer

DHS



Kamran Atri

NIEM Business Architecture Committee, Chief Technology Officer

CSE

1145 **Lunch**

1245 **IDENTITY INNOVATION WORKSHOP B: Mobile Biometrics Master Class for Government and Law Enforcement Applications**

In this workshop, we will focus on federal law enforcement requirements for increased mobile applications and devices that can capture and rapidly process biometric data.

- Capturing/authenticating biometric data quickly and accurately in remote locations
- Requirements for equipment agility
- Software and reliable infrastructure demands

1415 **Load Busses for MdTF**

1500 **SITE TOUR: DHS Maryland Test Facility (MdTF)**

The DHS Maryland Test Facility (MdTF) is part of the Apex Air Entry/Exit Re-engineering (AEER) Program and provides a controlled environment for laboratory evaluation and operational scenario-based testing of various entry and biometric exit concepts of operation under simulated airport conditions.

***Due to clearance requirements, this site tour has a registration deadline of Jan.15th and is restricted to US citizens.*

1630 **Closing Remarks**

1645 **End of Technical Training Day**

MAIN CONFERENCE DAY ONE

Tuesday, January 26th, 2016

0800 Registration & Coffee

0845 Chairperson's Welcome and Opening Remarks

0900 KEYNOTE: Technology to Advance and Integrate Interagency Biometric Capabilities

- Requirements for innovation in authentication
- The technology landscape for identity
- Requirements to meet future government challenges



Amy Hess
Executive Assistant Director
FBI Science and Technology Branch

0945 Requirements for Facial Recognition Modality at the Border

- Interagency standardization to reduce cost
- Multiple agency interfaces—OBIM, DOD Biometrics Identity Management Agency (BIMA), FBI Next Generation Identification (NGI)
- HSPD 24—improved screening to protect against known and suspected terrorists

1030 Demo Drive / Morning Networking & Refreshment

1115 Requirements for Biometrics and Technical Support to Homeland Security Investigations

- Overview of Current Homeland Security Investigations
- Facial/Iris/Voice Biometrics Requirements
- Multi-Sensor Data Fusion



SA Rodger L. Werner
Unit Chief, ISIM
ICE-HSI

1200 Networking Luncheon

1300 Rapid DNA Requirements: Developing a CODIS Core STR Profile From a Reference Sample Buccal Swab

- Requirements for automated extraction, amplification, separation, detection and allele calling without human intervention
- Integrating Rapid DNA technology
- Developing instruments capable of producing a CODIS-compatible DNA profile

1345 Developing Biometric Standards, Specification, and Technology

- Addressing noisy data intra-class variations and restricted degrees of freedom
- Decreasing spoof attacks and error rates
- Integration strategies of unimodal sources



Nick Megna
Unit Chief
Biometrics Center of Excellence (BCOE), FBI

1430 Afternoon Networking & Refreshment Break

1515 Leveraging Cloud Computing for Biometric Data to Speed Up Processing Times

- Tools to development of more efficient and effective large scale operational capabilities
- Standards for plug-and-play performance and system interoperability
- Biometric communications and privacy

1600 Future Requirements for DOJ Biometrics Technology and Policy

- Leveraging relational database management systems, desktop statistics and visualization
- Combining silos of data from different information sources into a single unified location
- Large scale data analysis requirements



James Loudermilk
Senior Level Technologist
FBI CJIS Division

1645 Closing Remarks

1700 End of Main Conference Day One



"Good exposure to what is happening across the government in biometrics"

—Katherine Bolger Engineering Program Manager Lockheed Martin

"The conference hit the high points of key business programs and emerging technologies with good networking opportunities"

—Ella Schiralli Manager Federal Government Markets 3M Company



MAIN CONFERENCE DAY TWO

Wednesday, January 27th, 2016

0800 **Registration & Coffee**

0845 **Chairperson's Recap of Conference Day One**

0900 **KEYNOTE: The Growing Demand for Biometrics**

- The technology landscape for identity
 - Meeting future government challenges
 - Requirements for innovation in authentication
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0945 **Homeland Advanced Recognition Technology**

- Requirements for innovation in authentication systems
 - Next generation tracking platforms
 - Large-scale database management
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1030 **Morning Networking & Refreshment Break**

1115 **Biometric Identity Verification for Immigration**

- The benefits of expanding biometric identity verification
- Potential role of multimodal biometric capture in immigration
- Potential uses of voice biometrics (and the potential concerns)



Lee Bowes
Acting Deputy Chief, Biometrics Division
U.S. Citizenship & Immigration Services

1200 **Maximizing Data from Patch-Based Recognition**

- Adapt to challenging lighting and stability environments
 - Programming for intuitive systems
 - Face reconstruction from video
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1245 **Networking Luncheon**

*"Networking with government agencies with like desires and interests in biometrics technology evolution and implementation"*

—Greg Scheyer Solutions Architect DIA



1345 **Face Recognition Across the Electromagnetic Spectrum**

- Face recognition concepts and their usage for researchers coming from the academia, industry or the government
- Face image representation across the electromagnetic spectrum as an emerging field
- Challenges/benefits of different face-based applications that exploit various sensors



Thirimachos Bourlai
Director, **MILab**
Assistant Professor, **WVU**

1430 **Law Enforcement Identity Intelligence Requirements**

- Information sharing for interagency collaboration
 - Implementing information sharing among stakeholders
 - LE identity intelligence architecture
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1515 **Afternoon Networking & Refreshment Break**

1600 **Technology Gaps in Biometrics for Government and Law Enforcement Applications**

- Accuracy and cost effectiveness considerations
- Multi-modal solutions
- Partial Occlusion




Prof Marios Saviddes
Professor
Carnegie Mellon University

1645 **Developing Metrics to Assess Biometric Enterprise Effectiveness**

- Current biometrics guidelines and technology gaps
 - Measuring error rates
 - Aligning capabilities of biometrics enterprise with mission requirements
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1715 **Closing Remarks**

1730 **End of Conference**

*"Very helpful experience to where we are and where we are going in biometrics"*

—Lamko Chau President Quodot Photonics Inc

