Speaker Biographies

Andrew Thiessen

PSCR Standards Lead

Andrew Thiessen is the Division Chief for the Systems Engineering and Evaluation Division within the Institute for Telecommunication Sciences (ITS), which is part of the National Telecommunications and Information Administration, U.S. Department of Commerce. In addition to his role as Division Chief, Mr. Thiessen's technical work at ITS is part of a joint effort between ITS and the NIST Communication Technology Laboratory (NIST/CTL) named the Public Safety Communications Research (PSCR) program. Mr. Thiessen leads the standards development efforts for the PSCR, which includes working in such standards development organizations as 3GPP, ATIS, GMSA, representing public safety's communications requirements. Mr. Thiessen is also the Vice-Chair of the National Public Safety Telecommunications Council (NPSTC) Technology Committee. Mr. Thiessen has worked as a principal in several small start-ups, as a Senior Systems Engineer for Sun Microsystems, an engineer for MITRE, and an engineer for the National Security Agency. Mr. Thiessen holds a Bachelor's degree in electrical engineering for Worcester Polytechnic Institute (WPI), a Bachelor's degree in English, also from WPI, a Master's degree in electrical engineering from Stanford University, and an MBA from Duke University.

Bob Johnk

PSCR In-Building Lead

Bob Johnk received his Ph.D. degree in Electrical Engineering at the University of Colorado in 1990, where he specialized in electromagnetics, propagation, and antennas. Bob is currently an electronics engineer at the Institute for Telecommunication Sciences (NTIA/ITS) where he is engaged in public safety radio communications research and mobile channel propagation research. Prior to joining NTIA/ITS in 2007, he was with the National Institute of Standards and Technology (NIST) in Boulder, Colorado for 17 years where he was the leader of the time-domain electromagnetic fields project. Bob has received best paper awards from the IEEE EMC Society, NIST, and NTIA. In 2015, he received a Silver Medal award from the Secretary of Commerce for his in-building public safety LTE research. Bob also received a U.S. Department of Commerce Bronze Medal award in 2015 for the development of a precision radio propagation system that is used to facilitate robust spectrum sharing. Bob enjoys spending time with his wife, Loan (married for 37 years :-)), and his sons, Kevin and Ben. Bob's favorite activity is taking walks with his wife in the beautiful Colorado sunshine.

Brad Fain

Georgia Tech Research Institute

Dr. Fain is a Principal Research Scientist at the Georgia Tech Research Institute with over 23 years of human factors and human performance research experience. He has led or assisted in a variety of human systems integration research programs ranging from the design of fixed and rotary wing crew interfaces to applied research in the field of accessible design. Dr. Fain has led on contributed to multiple wearable computing projects ranging from the development of soldier sensor networks to the design of activity trackers for people with functional limitations. Dr. Fain is the Director of Georgia Tech's HomeLab research initiative and currently leads a team of researchers pioneering research into issues and products design to assist with successful aging in place. Dr. Fain led the Rapid Equipping Force's (REF) blast data analysis project which developed new techniques and algorithms to support the analysis of IED blast data captured by the DARPA blast gauge and the IBESS sensor suite. Dr. Fain led the technical portion of the EAC's Military Heroes Initiative to search for new technologies that would allow recently wounded soldiers to place a private and secure vote. Dr. Fain served as the technical director of the EAC's Accessible Voting Technology Initiative (AVTI) to develop technologies solutions that facilitate accessible voting for the general population. The AVTI resulted in the development of a voting system test bed used to conduct accessibility research for ballot design and novel hardware design.

He was the technical director of the Air Force's Expeditionary Medicine Human Systems Integration research project and served as project director on National Council on Disability (NCD)'s universal design research project. Dr. Fain served as the lead designer of the aircrew interface for the Integrated Tactical Avionics System modification to the SH-2G(A). He was responsible for providing conceptual and detailed designs to the customer, writing the system interface design specifications detailing the configuration and function of these devices for the software team, and coordinating with the designers of other displays and controls for the cockpit. Under authority of the Naval Air Systems Command (NAVAIR), Dr. Fain provided oversight to Boeing's human factors program for the cockpit of the P-8A Poseidon. Dr. Fain

Speaker Biographies

Brian Stanton

NIST Information Technology Laboratory (MML)/PSCR

Brian Stanton obtained his Master's degree in Cognitive Psychology from Rensselaer Polytechnic Institute and is a Cognitive Scientist in the Visualization and Usability Group at the National Institute of Standards and Technology where he works on the Common Industry Format project developing usability standards and investigates usability and security issues ranging from password rules and analysis to privacy concerns. He has also worked on biometric projects for the Department of Homeland Security, Federal Bureau of Investigation's Hostage Rescue Team, and with Latent Fingerprint examiners. Previously he worked in private industry designing user interfaces for air traffic control systems and B2B web applications.

Chris Walton

PSCR Advanced Communications Research Group

Christopher Walton transitioned to PSCR from private industry in December of 2014. After completing a Bachelor's of Science in Electrical Engineering (1989) from the University of Texas at Arlington, Mr. Walton was a civilian employee of the United States Army Information Systems Engineering Command (USAISEC), where he designed and deployed RF systems. Mr. Walton left USAISEC to return to UTA where he completed a Master's of Science in Electrical Engineering in 1996. Working for international telecom vendors, Mr. Walton gained experience testing 2G cellular technologies while working with system test teams. In the later portion of his industry experience, he led the deployments of 3G and LTE wireless technologies in both domestic and international markets. After joining PSCR, Mr. Walton's research focus has been in the areas of local control and quality of service, priority and preemption on LTE broadband networks.

Speaker Biographies

Christian Militeau

West Safety Services

Mr. Militeau has more than 20 years of professional experience in the telecommunications industry. He started his career with Alcatel in France as a systems engineer. He was a telecommunications consultant at Telcordia Technologies. He joined West Safety Services (formerly Intrado, Inc.) in 2005 to lead systems engineering and standards development activities. The last few years he was instrumental in the development of NG9-1-1 and Wireless E9-1-1 standards for the public safety and telecommunications industries with leadership roles in ATIS and NENA. He has an Electrical Engineering Diploma from the University of Provence, Institute of Technology (France), and a M.S. Telecommunications Engineering and a M.B.A from the University of Colorado at Boulder.

David Howe

NIST Physical Measurement Laboratory (PML)/PSCR

David A. Howe is Leader of the Time and Frequency Metrology Group of the National Institute of Standards and Technology (NIST), Boulder, CO, and the Physics Laboratory's Time and Frequency Division, Boulder, CO. His expertise includes spectral estimation using digital processing techniques, spectral purity and noise analysis, digital servo design, automated accuracy evaluation of primary cesium standards, atomic beam analysis, reduction of oscillator acceleration sensitivity for special applications, statistical theory, and clock-ensemble algorithms. From 1970 to 1973, he was with the Dissemination Research Section at NIST (then the National Bureau of Standards) where he coordinated the first lunar ranging and spacecraft time-synchronization experiments as well as TV time experiments, from which evolved closed captioning. He worked in NIST's Atomic Standards Section from 1973 to 1984 doing advanced research on cesium and rugged, compact rubidium and ammonia standards with David Wineland. He, with Fred Walls, developed the first operating compact hydrogen maser in 1979. He returned to the Dissemination Research Section in 1984 to lead and implement several global high-accuracy satellite-based time-synchronization experiments with other national laboratories. For this contribution, he was awarded the Commerce Department's highest commendation, the Gold Medal, in 1990 for advancements in time calibrations among standards laboratories who participate in the maintenance of Universal Coordinated Time (UTC). From 1994 to 1999, he worked as a statistical analyst for the Time Scale Section which maintains UTC(NIST) from an ensemble of laboratory atomic frequency standards. David Howe is the developer of the Total and TheoH variances used in high-accuracy estimation of long-term frequency stability for which he won a NIST Bronze Medal and a second Bronze in 2012 for Achievements in Phase Noise Metrology. He received the 2013 IEEE Cady Award and was co-recipient of the 2013 IEEE UFFC Outstanding Paper and 2015 NIST Astin Measurement Sciences awards. He has over 150 publications and two patents in subjects related to precise frequency standards, timing, and synchronization.

Speaker Biographies

Dereck Orr

NIST CTL Division Chief & PSCR Program Manager

Dereck Orr is the Acting Director for the Communication Technology Laboratory (CTL). He is also the Division Chief for the Public Safety Communications Research Division at NIST's Communication Technology Laboratory, and has held that position since December 2002. In that role, he leads the Public Safety Communications Research (PSCR) program that serves as an objective technical advisor and laboratory to FirstNet, the Department of Homeland Security, and public safety to accelerate the adoption and implementation of the most critical public safety communication standards and technologies. From October 2003 until October 2004, Mr. Orr was detailed to the Department of Homeland Security to serve as the Chief of Staff of the SAFECOM Office within the Science and Technology Directorate, to help establish the new program. Prior to working at NIST, Mr. Orr served as a professional staff member of the Senate Appropriations Subcommittee for the Departments of Commerce, Justice, and State, and Related Agencies under Senator Fritz Hollings. In that position, Mr. Orr was responsible for the appropriations accounts relating to state and local law enforcement issues. Prior to that, Mr. Orr served four years at the Office of Community Oriented Policing Services (COPS) at the Department of Justice. Mr. Orr received a Masters in Public Policy from the College of William and Mary and a Bachelor of Arts in American History from the University of Texas at Austin.

Don Harriss

PSCR Lab Operations

Donald Harriss is the Senior Network Engineer for the Communication Technology Laboratory (CTL), Public Safety Communications Research (PSCR) Division within NIST. Donald works within the network operations team and is the primary architect of the PSCR Core demonstration network. He ensures that network best practices are implement, documented and adhere to security and industry standards. As part of this role, he performs research on core networking models and technologies used in Public Safety and carrier enterprise networks. Donald also serves as top tier network support to PSCR project engineers and stakeholders. Donald's educational background includes a Bachelors' of Science in Telecommunications Systems Management with a focus study in Network Security and Network Communications. His professional background includes expertise with "last mile" technologies such as Fiber To The Curb (FTTC,) traditional Time Division Multiplexing (TDM) such as T1 or T3 and Digital Subscriber Line (DSL.) Donald also has career certifications in packet switching and routing technologies as well as career experience involving deployable defense systems and global satellite surveillance data networks.

Speaker Biographies

Ellen Ryan

PSCR Lab Operations Group Lead

Ellen Ryan is the Operations Manager for the Communication Technology Laboratory (CTL), Public Safety Communications Research (PSCR) Division within NIST. She leads the network operations team and ensures all aspects of the PSCR demonstration network are adequately planned, deployed and maintained in a safe and secure manner. Additionally, she develops best-practice operational processes for the PSCR division in other areas such as deployment, safety and security practices. Ellen's background is in system verification and testing, with over 20 years of industry experience in telecommunications research and new product development. Her technical areas of expertise include electronic switching systems, digital cross connect systems and optical backhaul networks. Ellen's education includes a Master's of Science degree in Computer Science and two Bachelors' of Science degrees, one each in Computer Science and Geography.

Chief Harlin McEwen (Ret.)

FirstNet Public Safety Advisory Committee (PSAC) Chair

Chief McEwen brings more than 55 years of experience both as an advocate for public safety telecommunications issues and as a career law enforcement officer and administrator. He currently serves as Chairman of the Public Safety Advisory Committee (PSAC) of the First Responder Network Authority (FirstNet). He served as a Chief of Police for more than 20 years, last serving as Chief in the City of Ithaca, NY. He also served as Deputy Commissioner of the NY State Division of Criminal Justice Services and Director of the Bureau for Municipal Police, where he was responsible for overseeing the training and registration of all police officers and peace officers in New York State, as well as for the development and implementation of the NY State Law Enforcement Agency Accreditation Program. Following his retirement as Ithaca Police Chief he served as a Deputy Assistant Director of the Federal Bureau of Investigation with his office located at FBI Headquarters in Washington, DC. During his tenure at the FBI he provided executive oversight for new FBI Criminal Justice Information Services such as the National Crime Information Center (NCIC) 2000 Project, the Integrated Automated Fingerprint Identification System (IAFIS), and the Law Enforcement Online (LEO) system, and traveled extensively throughout the United States and internationally meeting with law enforcement groups and speaking at law enforcement and criminal justice… conferences. He served as Chair of the Communications & Technology Committee of the International Association of

Chief Harlin McEwen (Ret.) (ctd.)

FirstNet Public Safety Advisory Committee (PSAC) Chair

… conferences. He served as Chair of the Communications & Technology Committee of the International Association of Chiefs of Police (IACP), a position he held for more than 36 years, retiring in 2015. For many years he represented the IACP on numerous committees including the DHS SAFECOM Executive Committee, the Governing Board of the National Public Safety Telecommunications Council, and the Department of Justice Global Justice Information Sharing Advisory Committee. He also served as the Communications Advisor to the Major Cities Chiefs Association, the National Sheriffs' Association, and the Major County Sheriffs' Association. He is a Fellow in the Radio Club of America and serves on the RCA Board of Directors. He is a Life Member and Honorary President of the IACP, Life Member of the National Sheriffs' Association (NSA) and Life Member of the Association of Public-Safety Communications Officials-International (APCO). He has written many articles and is the recipient of many awards including the FBI Medal of Meritorious Achievement, the IACP Lone Star Award, the IJIS Institute Robert P. Shumate Award, the SEARCH O.J. Hawkins Award, the National Public Safety Telecommunications Council - Richard DeMello Award, and the FBI National Executive Institute Associates (NEIAA) Penrith Executive Leadership Award.

Heather Evans

NIST Program Coordination Office

Dr. Heather Evans is senior program analyst in the Program Coordination Office in the Director's Office at the National Institute of Standards and Technology (NIST). She covers policy and strategy issues for NIST in many areas including nanotechnology, bioscience, advanced manufacturing, and open innovation. Heather managed NIST's first-ever app competition, the Reference Data Challenge, which offered cash prizes to incentivize the creation of apps using NIST data. She serves as a mentor in the GSA Challenge Mentor program and leads the NIST-wide community of interest in prizes and challenges. Also in summer of 2015, Heather coordinated NIST's participation in the first-ever National Maker Faire, an event that attracted makers from across the country. As part of the Department of Commerce Executive Leadership Development Program, Heather served a detail assignment in the NASA Administrator's Office of Strategy Formulation. Prior to working at NIST, Heather covered emerging technology issues at the White House Office of Science and Technology Policy and the National Nanotechnology Coordination Office as an AAAS Science and Technology Policy Fellow. Heather was a Humboldt Postdoctoral Research Fellow at the Max Planck Institute for Dynamics and Self-Organization in Gottingen, Germany, and earned her doctorate in materials science from the University of California Santa Barbara.

Speaker Biographies

Jeb Benson

PSCR Advanced Communications Research Group

Jeb Benson has 10 years of experience as an RF Engineer and Engineering Manager with the Department of Defense researching, developing, and fielding products and systems for ISR applications. Prior to that he worked for five years as a Research Biologist in Alaska. Jeb has a BS in Electrical and Computer Engineering from the University of Alaska-Fairbanks, and a BS in Environmental Science from Oregon State University. He is also a licensed Professional Engineer and a DAWIA certified Level 2 Science and Technology Manager.

Jeff Bratcher

FirstNet CTO

Jeff Bratcher is the Chief Technology Officer for the First Responder Network Authority (FirstNet). Mr. Bratcher is located at the FirstNet technical office and laboratory in Boulder, Colorado and is responsible for the overall management and strategic direction of the teams developing technical specifications and network policies to execute FirstNet's mission to build, deploy, and operate the nationwide public safety broadband network (NPSBN) for the nation's first responders.

Prior to joining FirstNet, Mr. Bratcher was the Division Chief for the Telecommunications and IT Planning Division at the U.S. Department of Commerce National Telecommunications and Information Administration (NTIA) Institute for Telecommunication Sciences (ITS) located in Boulder, Colorado. His focus was the technical and operations management for the Public Safety Communications Research (PSCR) program. Mr. Bratcher began his Federal service with NTIA/ITS in 2003 and received the Department of Commerce Gold Medal award in 2006 and Silver and Bronze Medal awards in 2011 for his efforts related to Public Safety wireless communications research and development. Prior to joining Federal service, Mr. Bratcher spent 10 years in the private sector at Motorola Cellular and Siemens Mobile in wireless engineering, testing, field operations, and system deployment. Mr. Bratcher led efforts that launched several of the first digital and broadband wireless cellular systems in both domestic and international commercial markets. Mr. Bratcher received his Master's of Science in Telecommunications from Southern Methodist University and his Bachelor's of Science in Electrical Engineering from Texas Tech University.

Speaker Biographies

Jeong-ki Kim

Director, Ministry of Public Safety and Security (MPSS) of Korea

Mr. Kim is currently serving as the Team-Director of the Safe-Net Project Division at the Ministry of Public Safety and Security (MPSS) in Korea. His work includes the co-operation with other government organizations, including Safe-Net implementation planning. Director Kim was commissioned a 2nd Lieutenant in the Republic of Korea Army (ROKA) in 1985. Since then he has been making efforts to develop IT technologies for Korean Army and now he is assigned to detached duty in the Ministry of Public Safety and Security for the Safe-Net implementation. In 1994, he was in charge of the development of ROC-US C4I system and interoperability operation in CFC (Combined Force Command) and he continued to enhance ROC-US C4I system and interoperability operation in War Time Operation Transit Team by 2006.He was involved in the development of Tactical Information Communication Network (TICN), which was the new system of the Republic of Korea Army in 2011.

Director Kim is the Korea Military Academy graduate. He holds a bachelor's degree in electronics engineering from Korea Military Academy and a master's degree in management information system from Hannam University.

Joe Fournier

Portfolio Manager – Wireless Technologies, Centre for Security Science (CSS), Government of Canada

Joe has 26 years of experience in the wireless domain working on product, system and network level research & development. He is currently with the Canadian Federal Government's Centre for Security Science (CSS) in Ottawa, Canada responsible for the Wireless Technology portfolio. Prior to this, he led the wireless network design group at the Communications Research Centre (CRC) at Industry Canada.

Before joining the federal government, Joe held senior technical and management positions at a number of Industry organizations including Intelcan, Newbridge Networks and Alcatel Networks. While at Alcatel, Joe was Associate Vice President of Broadband Wireless Systems. Over his career, he has been involved with many turnkey wireless network designs and implementations in North and South America, the Caribbean, Europe, Africa and the Middle East. Joe holds a BASc in Electrical Engineering from the University of Ottawa.

Speaker Biographies

John Beltz

PSCR IT Security Manager

John's background is in network security where his most recent role was managing security teams at NIST in completing A&A activities including activities such as project management, security architecture consultation, documentation development/review, asset inventory analysis, network and web application vulnerability scanning and analysis, hands-on technical testing, package development and submittal and presentation to executive authorizing officials. Prior to that he performed similar services as a consultant with Booz Allen Hamilton based in McLean, VA. John is a proud veteran of the US Army where he served his country for 6 years. During his military career he also completed his Bachelor's Degree at Hawaii Pacific University majoring in Computer Information Systems. He also completed a Graduate Degree at Johns Hopkins University majoring in Information and Telecommunication Systems. John is a native of the Washington, DC area, but now lives in Colorado with his wife and his infant son. He enjoys playing in the Rocky Mountains at his favorite pastimes including mountain biking, backcountry skiing, and hiking.

John Garofolo

PSCR Video Analytics

John Garofolo has been with the National Institute of Standards and Technology (NIST) Information Technology Laboratory since 1987 leading the development of human language-, computer vision-, and multimedia technology research and evaluation activities. He now provides senior leadership for the development of new research and measurement science programs focused on unstructured data analytic technology challenges, especially in the area of video analytics. He brings his knowledge of rigorous measurement science, data- and evaluation-driven research, and an interdisciplinary perspective to bear to bring diverse communities of interest together to create innovative approaches to the development of next-generation analytic technologies that address critically important national needs. He is also an expert in R&D strategic planning and has led the NIST Information Technology Laboratory and other agencies in applying best practices in conjunction with an understanding of the state-of-the-art, trends, and emerging technologies in developing their R&D strategies. Over the last 10 years, he has worked in developing test and measurement methods, tools, and data for a variety of emerging video analytic technologies. In 2010, he co-developed the VISITORS program and symposium to bring the computer vision research community together with the retail loss prevention community to discuss how video analytics could be brought to bear to address the fast-growing shoplifting problem. In 2010, he created the ALADDIN video and multimedia analytics R&D program at ODNI IARPA to create video/audio understanding technology with search-engine-like capabilities to assist analysts in triaging enormous amounts of unconstrained video clips.

John Garofolo (ctd.)

PSCR Video Analytics

…In 2012-2013, he brought attention to the need for technologies to address the fast-growing physical security video area with a strategic discussion and workshop focused on the development of technology to analyze the data from massive networks of CCTV cameras. In 2014, he created and continues to lead the OSTP NITRD Video and Image Analytics (VIA) Interagency Working Group which is focused on both developing Federal interagency strategy for video and image analysis technology R&D and fostering collaboration across agencies and with state and local governments. In leading VIA, he recognized the surge of needs related to video in public safety. He is now working with the public safety community to develop a community strategy for R&D, collaboration, measurement, standards related to video analytics. He is an active participant in the NIST Public Safety Communications Research Program, the NIST/DoJ-led Forensic Science "OSAC" Program, the DHS-led Video Quality in Public Safety Program, the Underwriters Labs Technical Panel on Tactical Camera Standards, and the National Public Safety Telecommunications Council Video Technology Advisory Group.

John Merrill

DHS Science & Technology Directorate (S&T), Office for Interoperability and Compatibility (OIC)

John Merrill is currently the Director for the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) Office for Interoperability and Compatibility (OIC). As OIC Director, he oversees first responder voice and data interoperability, information sharing, and alerts, warnings and notifications programs. Additionally, as the Next Generation First Responder (NGFR) Program Director, he leads a research, development, testing and evaluation program with over 40 projects focused on making responders better protected, connected and fully aware. He was formerly the senior policy and technical advisor for DHS on GPS interference, detection, mitigation and radio frequency spectrum management. He is a 28-year veteran of the U.S. Coast Guard with experience in program and policy management, radio navigation, maritime law enforcement, search and rescue, vessel traffic services, and telecommunications.

Speaker Biographies

Joshua Franklin

NIST Information Technology Laboratory (ITL)/PSCR

Joshua is an IT Security Engineer at the National Institute of Standards and Technology (NIST) focusing on mobile isolation systems and LTE security. Additionally, Joshua leads the mobile security efforts at the National Cybersecurity Center of Excellence (NCCoE). After graduating from Kennesaw State University with a Bachelors of Science in Information Systems, he received a Masters of Science in Information Security and Assurance from George Mason University.

Lexie Spiro

Motorola

Lexie Spiro is director of User Experience Design at Motorola Solutions. Part of the Chief Technology Office, Spiro leads a team responsible for turning insights from customer research into design-led, purpose-built experiences. His team's work enables team communication, situational awareness and enhanced productivity from the command center to the field.

Spiro joined Motorola in 2006 to design advanced-concept mobile computers, data capture devices and wearable technology for warehousing, transportation & logistics, retail, and healthcare industries. Since then, he has designed devices and applications that combine hardware and software into cohesive user experiences. He holds several U.S. patents related to industrial design and user interface design. Spiro earned a bachelor's degree in industrial and interaction design from Syracuse University.

Speaker Biographies

Marc Leh

PSCR Roadmapping Support

Marc Leh is a Consultant for Corner Alliance who was supported PSCR's R&D Strategy since 2014. Marc was a lead author for both PSCR's Location-based Services Roadmap and Public Safety Analytics Roadmap, and organizes a variety of working groups relating to public safety technology and the telecommunications industry. Prior to joining Corner Alliance, Marc received his B.A. in History from Cornell University.

Mary Theofanos

NIST Material Measurement Laboratory (MML)/PSCR

Mary Theofanos is a Computer Scientist with NIST's Materials Measurement Laboratory (MML) where she performs research on usability and human factors of systems. She develops standards for usability, and represents NIST on the JTC1 SC7 TAG and is Co-Convener of WG 28 on usability of software systems. Mary is the principal architect of the Usability and Security Program evaluating the human factors and usability of cyber security and biometric systems. She established the Biometrics Usability Program for the federal government, the first open research program to incorporate usability into biometrics research, elevating usability to a recognized critical component of biometrics research. Before joining NIST, she was the Manager of the National Cancer Institute's (NCI) Communication Technologies Research Center (CTRC) a state-of-the-art usability testing facility for web sites, applications, and emerging technologies, as well as a training facility and collaborative design center. She spent 15 years as a program manager for software technology at the Oak Ridge National Laboratory complex of the U.S. Department of Energy.

Speaker Biographies

Michael Ogata

NIST Information Technology Laboratory (ITL)/PSCR

Michael Ogata has worked for the National Institute of Standards and Technology(NIST) since 2005. He is the lead on the mobile application security research efforts being undertaken by NIST on behalf of PSCR. For the past 3 years, Michael has worked closely with members of the public safety community to explore mobile application concerns unique to that audience. In addition to his public safety work, his other roles at NIST revolve around digital forensics, specializing in mobile application forensics. Michael has a Bachelor of Science in Computer Science from the University of Maryland, Baltimore County.

Mika Skarp

CloudStreet

Cloudstreet founder and CTO, Mika Skarp is an awarded telecom network technologist, entrepreneur and executive. After over a decade and a half developing groundbreaking technology-enabled business models for Nokia Siemens in Finland, Mika consolidated his learnings, experience and patents to launch Cloudstreet and the world's first application-aware network.

Recognizing the glaring disconnect between and an increasingly data-hungry world and an outdated "best effort" business model for telecom service that jeopardized the case for future infrastructure investment, Skarp saw an opportunity. Moving toward a 5th generation (5G) network overlay and an army of new product, service and content delivery innovations waiting to come to life, telecom operators would have no choice but to find a way to begin differentiating service levels to better manage finite bandwidth and a spectrum of different needs.

With the arrival of the Internet of Things (IoT), driverless cars, wearable tech and an insatiable demand for HD video streaming on demand, Skarp saw that the idea of an application-aware network was not a matter of if, but when. The only challenge was to find the right combination of network technologies and business layer solutions to come together to prove it was possible.

Speaker Biographies

Neal Fishman

IBM

Neal Fishman is the Program Director for Data Based Pathology within IBM's Analytics Business Unit and leads a group of architects worldwide for the Public Sector Cognitive Solutions Team. Neal is the author of "Viral Data in SOA: An Enterprise Pandemic" and the co-author of "Enterprise Architecture Using the Zachman Framework".

Noah Fritz

International Association of Crime Analysts (IACA)

Dr. Noah Fritz is the Strategic Planning, Analysis and Research Center (SPARC) Supervisor at the Tempe Police Department and the past Crime Analysis Manager at the San Diego County Sheriff's Department. Noah returned to the "field" of crime analysis after spending five years as an Assistant Professor in the Criminal Justice & Criminology Department at Metropolitan State University of Denver. His primary area of research is Crime Mapping, Crime Analysis and Geographic Information Systems. He was the previous Director and Founder of the Crime Mapping and Analysis Program (CMAP)—a U.S. Department of Justice sponsored training and technical assistance program; and served as the Deputy Director of NLECTC; and a previous two term President of the IACA (2000-2006). Most notable accomplishments include a Doctorate in Justice and Social Inquiry from Arizona State University, a Master's from same and undergraduate degrees in Sociology and Criminal Justice from Illinois State University. He has authored articles in the Sociological Quarterly, the Encyclopedia of Criminology and Deviant Behavior, is a co-author of Exploring Crime Analysis (2004); and appeared nationally on ABC's Weekend News Edition featuring crime mapping and has been featured on public radio in Australia where he provided consulting services to the Victoria Police Department. Noah enjoys camping, hiking and golf; and spending time outdoors with his family and friends.

Speaker Biographies

Paul Grassi

NIST National Strategy for Trusted Identities in Cyberspace (NSTIC)/PSCR

Paul Grassi is the Senior Standards and Technology Advisor at the National Institute of Standards and Technology (NIST). He joined NIST in June 2014 to advance and accelerate the development and adoption of identity authentication and authorization related standards and technologies needed to implement the identity ecosystem envisioned in the National Strategy for Trusted Identities in Cyberspace (NSTIC).

Mr. Grassi comes to NIST with a broad background of technology and management consulting, and significant experience developing enterprise security strategies and systems, having served a range of Fortune 500 companies, as well as domestic and foreign governments.

Chief Paul Roberts

Division Chief – City of Boise Fire Department

Paul Roberts is the Division Chief of Special Operations for the City of Boise Fire Department with 28 years of fire service in with the Boise Fore Department and two departments in the Dayton Ohio area. He has also held positions as a paramedic firefighter, Wildfire Hot-Shot Crew member and Helitac Crew member with the federal government. Chief Roberts is a U.S. Army veteran servicing overseas and stateside; infantry/communications NCO.

Aside from managing 4 special operations teams, two statewide regional response teams and 1 Type Three Incident Management Team Chief Roberts overseas communications for the Boise Fire Department. Chief Roberts has been fully engage in first responder communication since 2005 working with Public Safety Communication Research and the International Assoc. of Fire Chiefs to research audio intelligibility. Today Chief Roberts continues to engage in first responder communication working with local, state and federal stakeholders to ensure effective interoperable communication.

Speaker Biographies

Ray Bizal

National Fire Protection Association (NFPA)

Mr. Bizal is the Southwest Regional Director for the National Fire Protection Association (NFPA). In this capacity, he provides outreach to NFPA stakeholders regarding the many activities undertaken by the association. He also supports the adoption and enforcement of NFPA codes and standards, and advocates for fire safety at the local and state legislative levels. He currently serves on the Board of Directors for the Southern California Chapter of the Society of Fire Protection Engineers, he is an officer of the California Fire Prevention Institute, and serves as a member of the Los Angeles Fire Department's Fire Code Advisory Committee. Prior to joining NFPA in 2000, Ray spent 12 years with the International Conference of Building Officials (ICBO) and International Fire Code Institute (IFCI), where he served in several positions, including Uniform Fire Code Coordinator and Manager of Code Development. As manager of code development, he was responsible for the development of the Uniform Codes and related documents, as well as ICBO's participation in the technical development of the ICC's International Codes and related documents. He also served as staff liaison for the drafting and development of the Wildland Urban Interface Code in the late 1990's, which was produced through the California State Fire Marshal's office from a FEMA grant. With 30 years in the fire protection profession, Ray also worked at the Lockheed Missiles and Space Company Fire Department as a fire protection specialist, and Factory Mutual Engineering Association as a loss prevention consultant. He is the 2006 recipient of the Western Fire Chiefs Association's Robert W. Gain Award and the 2014 recipient of the California Fire Chiefs, Northern California Fire Prevention Officer's Charles H. Gray Memorial Award. Holding a Bachelor's degree in Mechanical Engineering from the University of Colorado at Boulder, he is a registered Fire Protection Engineer in California.

Richard Hewlett

Deputy Director, Emergency Services Mobile Communications Programme (ESMCP), UK

Richard is a Deputy Director within the Home Office's Emergency Services Mobile Communications Programme (ESMCP). He has executive responsibility for bringing the £1bn core service into live operation. Between 2013-2015 he was responsible for the Airwave Service that is used by all Police Forces in England, Scotland and Wales. Prior to joining the Home Office Richard was a key figure in migrating the Fire and Rescue Services from their VHF analogue radio networks onto Tetra between 2002 and 2009. He then went on to manage the live service on behalf of the Department for Communities and Local Government between 2009 and 2013.

Speaker Biographies

Richard Rouil

PSCR Modeling & Simulation

Richard Rouil is a researcher working in the Wireless Networks Division at the National Institute of Standards and Technology (NIST). He holds a Ph.D. in Computer Science from Telecom Bretagne, France (2009) that focused on mobility in heterogeneous networks. His main interests include protocol modeling and simulation of communication networks. His current research focuses on the performance evaluation of LTE to support the deployment of networks used by Public Safety.

Rear Admiral Ronald Hewitt, USCG (Ret.)

DHS National Protection and Programs Directorate (NPPD),
Office of Emergency Communications (OEC)

Ronald T. Hewitt assumed the duties as Director of the Department of Homeland Security's Office of Emergency Communications on November 13, 2012. In this role, Mr. Hewitt plays a critical role for ensuring continuous, interoperable communications that support the Federal Government's mission essential functions and all the Nation's emergency responders to keep America safe, secure and resilient. Prior to becoming the OEC Director, Mr. Hewitt served for six months as the Director and Deputy Manager of the National Communications System (NCS), a consortium of 24 Federal Departments and Agencies responsible for National Security/Emergency Preparedness (NS/EP) communications. The NCS was dissolved on July 6, 2012 in accordance with Executive Order (EO) 13618, signed by President Obama. Various assets of the NCS were merged with OEC to lead NS/EP and emergency communications set forth in Title 18 of the Homeland Security Act of 2002, as amended, 6 U.S.C. § 571 et.seq., and to provide the technical staff to complete DHS responsibilities defined by EO 13618.

Before his arrival to the NCS, Rear Admiral Hewitt served as the U.S. Coast Guard's Assistant Commandant for Human Resources. The Human Resources Directorate is made up of HR professionals, military and civilian, with one distinct mission: to meet the people needs of the Coast Guard while meeting the needs of Coast Guard people…His prior flag assignments include Commander, Coast Guard Maintenance and Logistics Command Atlantic, which provided support to all Coast Guard units between the Rockies and the Persian Gulf; and Assistant Commandant for Command, Control, Communications, Computers and Information Technology (CG-6), which is the Coast Guard's Chief Information Officer (CIO)...

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Rear Admiral Hewitt's other career assignments include Project Manager for "Rescue 21," and the Marine Information for Safety and Law Enforcement (MISLE); Commanding Officer, Electronics Support Unit Boston; Executive Officer, Communications Area Master Station Pacific, Project Engineer at the Omega Navigation Systems Center, Electronics Engineering Center in Wildwood, New Jersey and Operations Officer on the USCGC BITTERSWEET.
Mr. Hewitt, a native of Oregon, is a 1978 graduate of the U.S. Coast Guard Academy with a Bachelor of Science Degree; as well as a 1982 graduate of Purdue University with a Master of Science Degree; both degrees in Electrical Engineering. In 2000, he received a Master's Certificate in Information Technology Project Management from The George Washington University and is a certified Project Management Professional.

Ryan Felts

PSCR Roadmapping Support

Ryan is a Principal Consultant with Corner Alliance, Inc. Since 2012, Ryan has supported PSCR in the development of R&D Technology Roadmaps and is co-author of the Location-based Services R&D Roadmap and Public Safety Analytics R&D Roadmap. In addition to supporting PSCR, Ryan has supported the Department of Homeland Security Office of Emergency Communications (OEC) and Science & Technology (S&T) Directorate, and the Department of Commerce, National Telecommunications & Information Administration (NTIA) and National Institute of Standards and Technology (NIST). Prior to joining Corner Alliance, Ryan was a Senior Consultant with Touchstone Consulting. From 2007-2012 Ryan supported OEC and the management of the SAFECOM program and supported the development of the Communications Unit Leader (COML) and Communications Technician (COMT) training programs and the State of Texas and Commonwealth of Virginia in broadband and interoperability planning related efforts. Ryan received a Bachelor of Arts in Communication from Virginia Tech.

Speaker Biographies

Stephen Voran

PSCR Audio Quality Lead

Stephen Voran received the MSEE degree from the University of Colorado in 1989. He has been with the Institute for Telecommunication Sciences in Boulder, Colorado since 1990. His research there has been in the areas of signal processing applications to quality assessment, coding, transmission, and enhancement of speech and audio signals. He has published numerous technical reports and papers on those topics.

Steve Rader

NASA Center of Excellence for Collaborative Innovation (CoECI)

Steve Rader currently serves as the Deputy Manager of NASA's Center of Excellence for Collaborative Innovation (CoECI), which is working to infuse challenge and crowdsourcing innovation approaches at NASA and across the federal government. CoECI focuses on the study and use of curated communities that utilize prize and challenge based methods to deliver innovative solutions for NASA and the US government.

Mr. Rader has Mechanical Engineering degree from Rice University and has worked at NASA's Johnson Space Center in Houston, TX for 25 years. He started his career as an environmental control and life support systems flight controller for Space Station Operations. Mr. Rader moved into flight software engineering where he developed delay tolerant communications software for the Space Shuttle and International Space Station as wells as ground and flight command & control systems for the X-38 emergency crew return vehicle. Additionally, Mr. Rader led the development of NASA's Constellation Program's interoperable Command, Control, Communications & Information (C3I) architecture. After the Constellation program, Mr. Rader supported the Mars design reference mission definition and a number of analog missions studying space mission operations and design. Mr. Rader began studying crowdsourcing communities in 2011 and joined the Center of Excellence for Collaborative Innovation as the deputy manager in 2013.

Speaker Biographies

Susan Swenson

FirstNet Chairwoman

Susan Swenson brings extensive experience as a telecommunications and technology executive to the FirstNet Board. She currently serves as the CEO and Chair of the Board at Novatel Wireless. Ms. Swenson also served as President and CEO of business software provider Sage North America from 2008-2011, COO of digital content company, New Motion/Atrinsic, mobile virtual network operator, Amp'd Mobile, and T-Mobile USA. She was also President and COO of Leap Wireless, International (Cricket Communications) from 1999-2004 and President and CEO of Cellular One from 1994-1999. Ms. Swenson serves on the board of Directors of Wells Fargo, Spirent Communications Plc, and Harmonic, Inc.

Tammi Marcoullier

PSCR Prize Architect

Ms. Marcoullier leads the prize and challenge program at NIST's Public Safety Communications Research (PSCR) Innovation Accelerator. Prior to joining NIST, she led the federal-wide prize program, Challenge.gov, with more than 680 competitions from 98 agencies, $220 million in prizes, and collaboration with hundreds of thousands of people around the world. She received a Harvard Innovation Award in 2014 and advised foreign governments on policy and procedures to launch open innovation programs. Ms. Marcoullier has expertise in strategy and program design, product development, and launching media and communications technology initiatives. She has worked for technology start-up companies and major media organizations (including USA Today, WashingtonPost.com, and AOL), wrote a book about bobsled, and gets her best ideas while hiking Colorado's trails.

Speaker Biographies

Tom Sorley

NPSTC, City of Houston Deputy CIO, Public Safety

Tom Sorley is a Deputy CIO for Public Safety with Houston Information Technology Services. He is a nationally recognized leader in public safety communications with over 30 years of experience in city and county government. Mr. Sorley holds a Bachelor's degree in management and a Master's degree in business, both from Nova Southeastern University. Mr. Sorley serves on several national and international committees including as Chair of the Technology Committee for the National Public Safety Telecommunications Council (NPSTC) and as Vice-Chair of the FirstNet Public Safety Advisory Committee (PSAC).

Tracy McElvaney

PSCR Advanced Communications Research Group Lead

Joining PSCR in 2014, Tracy added 19+ years of experience in cellular development, deployment and outage recovery to the team. Tracy currently serves as the Group Leader of the Advanced Communications Research Group (ACRG) within PSCR. The ACRG carries out forward-looking research for NIST, Federal sponsors and Public Safety stakeholders in a variety of areas ranging from metrology issues, to network capabilities advancement, to standards and requirements development.

Speaker Biographies

Vihang Jani

PSCR Advanced Communications Research Group

Joining PSCR in 2015, Vihang has added 15+ years of experience in cellular interoperability to the team. Vihang holds a Master of Science in Computer Science and Engineering from the University of Texas in Arlington (UTA). During his career in Cellular Networks R&D, Vihang has been recognized with Ace of Heart Award in interoperability. Vihang has extensive experience in Inter-Vendor Verification and interoperability. He also has worked with IMS/VoLTE and architecting IOT solutions in the Rail Road industry. Vihang is involved in R&D efforts at Advanced Communications Research Group within PSCR and is currently focused on Location Based services for Public Safety.

Wim Brouwer

Nokia

Wim is CTO for FirstNet/Federal customers in Nokia. He has more than 30 years of experience in telecommunications, and is responsible for the public safety LTE end-to-end architecture. In this role he works with the individual products to assure the needs of public safety are incorporated. He works with FirstNet as well as public safety customers to drive the nationwide public safety network forward. He also works closely with the National Institute of Science and Technology (NIST), who is chartered by the FCC to create an LTE test bed specifically focused on public safety. Wim was a member of the Interconnectivity Infrastructure Group established to define interoperability between the various waiver networks, and was a subject matter expert on the FCC Technical Advisory Board for First Responder Interoperability. Wim is also a member of APCO and serves on the APCO Broadband committee.