

Speaker Biographies

John M. Boyd is the Assistant Director of Futures Identity in the Office of Biometric Identity Management (OBIM) within the National Protection and Programs Directorate (NPPD) of the Department of Homeland Security (DHS). OBIM, formerly the United States Visitor and Immigrant Status Indicator Technology (US-VISIT) Program, is the lead entity in DHS for biometric identity management services across Government. Boyd's responsibilities include overseeing science and technology activities related to biometrics and identity services as well as special projects involving interagency and international partners, industry, and academia. As a civilian, Boyd was a line manager for ECS Federal, LLC, leading an Agile software development team that developed, maintained, and tested the Federal Bureau of Investigation's Combined DNA Index System (CODIS) software. In a government position, Boyd served as the Director, Defense Biometrics and Forensics, in the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics/Assistant Secretary of Defense for Research and Engineering within the Department of Defense. Boyd was responsible for conducting Secretary of Defense Principal Staff Assistant-level responsibilities for oversight of all aspects of the defense biometric and forensic enterprise. As a Captain in the U.S. Navy, Mr. Boyd served on active duty as the Director, Naval Identity Management, on the Secretary of the Navy staff. He interacted and coordinated with numerous Government departments in advancing technologies, policies, and human factors to improve applications of digital identities. Captain Boyd drove development of a handheld biometric device supporting Navy, Marine Corps, and Naval Criminal Investigative Service operational needs. Previously, he commanded the Reserve Component unit of the Navy Headquarters Manpower, Personnel, Training, and Education organization. As a civilian, he worked as a program manager for Battelle Memorial Institute, supporting Joint Staff J-8, then Navy Headquarters Staff, in the field of chemical, biological, radiological, and nuclear defense, as well as anti-terrorism/force protection. Additionally, Boyd managed highly hazardous chemical plants for a variety of companies across the United States. Boyd holds a bachelor's degree in physics from Virginia Military Institute. He earned master's degrees from the Naval Postgraduate School in operations analysis and the Naval War College in national security and strategic studies. He served on active duty in the U.S. Navy Submarine Force from 1982 to 1994 and in the Navy Reserves until 2012.

Clare Garvie is a distinguished fellow with the Center on Privacy & Technology at Georgetown Law. She was lead author on a number of the Center's reports on face recognition, including: *The Perpetual Line-Up: Unregulated Police Face Recognition in America* in 2016; and *Garbage In, Garbage Out: Face Recognition on Flawed Data and America Under Watch: Face Surveillance in the United States* in 2019, as well as a forthcoming report titled *A Forensic Without the Science: Face Recognition in U.S. Criminal Investigations*. In 2019 she testified before the House Oversight Committee about police use of face recognition. Her commentary has appeared in *The New York Times*, *The Washington Post*, and *The Wall Street Journal*, and she serves as an expert resource to legislators, defense attorneys, police departments, and administrative agencies. She received her J.D. from Georgetown Law and her B.A. from Barnard College in political science, human rights, and psychology.

Patrick Grother is a scientist in the Information Technology Laboratory at the National Institute of Standards and Technology, a division of the U.S. Department of Commerce. Mr. Grother is responsible for

program, the world's largest independent public testing program of face recognition algorithms. He co-chairs NIST's biannual International Face Performance Conference (IFPC) on measurement, metrics and certification and assists several U.S. Government agencies in biometrics performance assessment and standardization. Since 2018, Mr. Grother has served as the chairman of the ISO/IEC/JTC 1 Subcommittee 37 on Biometrics, where he serves as editor of five international standards. He is a three-time recipient of the Department of Commerce Gold Medal award for service to US Industry. Mr. Grother has an M.S. in computer science from Imperial College, London.

Jody Hardin is currently serving as the Acting Executive Director for Planning, Program Analysis and Evaluation in CBP's Office of Field Operations. In this role, she leads strategy development, operational analysis and business transformation efforts that impact all ports of entry and pre-clearance locations including over 27,000 frontline employees. Ms. Hardin oversees innovation efforts throughout the Office of Field Operations and was instrumental in developing long term strategies for facial biometrics, pleasure boat and cruise process reengineering. She also leads the technology testing for land border biometrics solutions and the development of the CBP One app. Ms. Hardin began her federal career in 1991 with the Internal Revenue Service and joined CBP as an Immigration Inspector in Honolulu where she served for 17 years before moving to CBP HQ. She holds a B.A. in Political Science from the University of Hawai'i.

John Howard is a computer scientist specializing in biometrics research and the test and evaluation of artificial intelligence systems. He holds a Ph.D. in Computer Science from Southern Methodist University where his dissertation focused on understanding group-based performance variation in biometric recognition algorithms. Dr. Howard has served as the principal investigator on numerous research and development efforts across industry and government. His work appears regularly in print media outlets, such as the New York Times and the Washington Post, as well as in congressional testimony. He is currently a principal scientist at the Maryland Test Facility, a government funded research lab focused on AI application testing. He also serves as the editor of ISO-19795-10, an international standard on fairness in biometric systems, a research fellow at SMU's AT&T Center, and a member of the IEEE Biometric Council Subcommittee on Societal Impact and Social Good. In his free time, he also consults as an expert witness on various legal cases related to biometric information privacy laws in the U.S.

Benji Hutchinson is the President and Chief Operating Officer of Paravision, a San Francisco based artificial intelligence (AI) and computer vision (CV) company, specializing in next generation facial recognition technologies. He has over 20 years of experience in the biometrics, identity, AI, and computer vision industries supporting private and public sector customers. His current focus is accelerating growth globally, refining operations for customer success, and scaling a world class AI and CV company. From 2016 to 2021, he led the effort within NEC Corporation of America to establish a federal government practice of identity technologies, focused on national security customers, along with a Washington DC based office. These efforts culminated with the creation of a separate foreign ownership and conflict of interest (FOCI) mitigated company, NEC National Security Systems, Inc. or NEC NSS, launched in October 2020. This wholly owned subsidiary focuses on secure and classified federal business in addition to NEC's existing unclassified footprint in the US government space. Mr. Hutchinson was also an adjunct professor for a graduate seminar on policy, privacy, ethics, and law for identity analysis in the Forensic Science Program at George Mason University (GMU) from 2016 to 2021. He currently serves as a Member of the Transition Advisory Board for the GMU Criminal Investigations and Network Analysis Center, a DHS funded Center of Excellence. From 2012 to 2016, Mr. Hutchinson was the Senior Director for U.S. federal government national security accounts at MorphoTrust USA. He led efforts that won a key account in the Intelligence Community and oversaw the launch of the company's first enterprise multimodal biometric cloud-based solution. From 2010 to 2012, Mr. Hutchinson served as a Senior Biometric and Identity Intelligence Technology Consultant for the Pentagon's Office of the Under Secretary of Defense for Intelligence. He co-led the North Atlantic Treaty Organization (NATO) technical team developing the

“Standardization Agreement (STANAG) 4715 – NATO Biometrics Data, Interchange, Watch Listing, and Reporting Standard”. From 2006–2010, Mr. Hutchinson served as a Biometric Standards Consultant for the US Army Biometrics Task Force. During his tenure, he served as a subject matter expert for the US National (INCITS/M1) and the International (ISO/IEC JTC 1/SC 37) Standards Bodies on Biometrics. He also chaired the US Interagency Department of Defense Biometric Standards Working Group. From 2004–2006, he served as a member of the technology team that implemented the US Department of State Consular Affairs multimodal biometric visa and passport issuance systems at various consulates and embassies around the globe.

Kate McKenzie is an Attorney Advisor with the U.S. Department of Justice (DOJ), Office of Privacy and Civil Liberties (OPCL). She is responsible for handling a variety of privacy and civil liberty issues including those raised through the use of artificial intelligence and biometrics. Kate is intimately involved in policy development concerning the use of emerging technologies, such as facial recognition technology. In addition to developing policy, Kate works to ensure that all applicable privacy requirements, such as those mandated under The Privacy Act of 1974 and The E-Government Act of 2002, are satisfied by the law enforcement and national security components of DOJ. Prior to joining OPCL, Kate was a prosecutor in New York City and a national security attorney. In addition to litigating criminal cases, Kate regularly appeared before the Foreign Intelligence Surveillance Court to help provide law enforcement officers with the tools necessary for high-paced, complex counterterrorism investigations. Kate has trained law enforcement agents and federal prosecutors on the use of the Foreign Intelligence Surveillance Act to enhance their investigations while complying with the law.

Mei Ngan is a scientist at the National Institute of Standards and Technology (NIST). Her research focus includes evaluation of face recognition and tattoo recognition technologies. She is currently involved in a number of key face recognition testing activities under NIST’s Face Recognition Vendor Test (FRVT). Mei has authored a number of technical publications on topics including face recognition with face masks, face morph detection, and facial age and gender estimation. Her publication of a seminal open tattoo database for developing tattoo recognition research was recognized with a Special Contribution Award at the 2015 IEEE International Conference on Identity, Security and Behavior Analysis. Mei was awarded the Department of Commerce Gold Medal Award in 2020 and was a recipient of the 2020 Women in Biometrics Award, a globally-recognized award honoring innovative women in the biometrics field. Prior to NIST, Mei worked at The MITRE Corporation, Booz Allen Hamilton, and Lockheed Martin Corporation.

Arun Vemury is the Director of the Biometric and Identity Technology Center at the U.S. Department of Homeland Security (DHS) Science and Technology Directorate (S&T). In this role, Arun provides leadership and guidance to enable the development of bleeding edge and cost-effective biometric, identity, and privacy-enhancing technologies and capabilities. Arun is responsible for anticipating future needs, setting research agendas, and coordinating the activities of international subject matter experts to close gaps in knowledge and capabilities. Arun has 20 years of experience managing research, development, test, and evaluation (RDT&E) programs, partnering with industry to develop new and advanced capabilities, and influencing the development of international standards to promote mature and interoperable capabilities. He has received numerous government awards for program management, science and engineering, and collaboration. Before managing the Biometric and Identity Technology Center, Arun was a Program Manager and Director for the Apex AEER (Air Entry/Exit Re-Engineering) Project. He led a partnership between S&T and U.S. Customs and Border Protection (CBP) to enhance both air entry and exit operational processes by developing, rigorously testing, and informing approaches. This work enabled DHS to identify technically viable solutions to fulfill some of the last remaining 9/11 Commission Recommendations and facilitate inspecting operations for aviation travelers entering and departing the U.S. Arun holds a Master of Science Degree in Electrical and Computer Engineering from George Washington University and an undergraduate degree in Computer Engineering from the University of Maryland, College Park.