



Bios

Michael Beyerle is the Marketing Manager for Innovation at GE Appliances. He has over 25 years of experience in engineering design, product management, and marketing at GE Appliances and currently leads GE Appliances' development of Consumer Connected Wifi Appliance products. Over the last several years, his team has developed GE's new GeoSpring™ Heat Pump Water Heater business, GE's Brillion™ Grid Connected Smart Appliances, and Nucleus™ Energy Management System. He actively is involved in GE Appliances' market research efforts tracking consumer trends, regulatory and policy direction, and technology development. Mr. Beyerle holds both a B.S. and a Master of Engineering in Mechanical Engineering from the University of Louisville, is a licensed Professional Engineer, holds 25 U.S. and international patents, and is a certified Six Sigma Master Black Belt.

Ryan Calo is an Assistant Professor of Law at the University of Washington, where he researches the intersection of law and emerging technology. His work on drones, driverless cars, privacy, and other topics has appeared in law reviews and major news outlets, including the *New York Times*, the *Wall Street Journal*, and NPR. Professor Calo serves on numerous advisory boards, including the Electronic Privacy Information Center, the Electronic Frontier Foundation, the Future of Privacy Forum, and National Robotics Week. Professor Calo co-chairs the Robotics and Artificial Intelligence committee of the

ABA and is a member of the Executive Committee of the AALS Section on Internet and Computer Law. Professor Calo previously served as a director at the Stanford Law School Center for Internet and Society, where he remains an Affiliate Scholar. He received his J.D., *cum laude*, from the University of Michigan and clerked for the Honorable R. Guy Cole on the U.S. Court of Appeals for the Sixth Circuit. Prior to law school, Professor Calo was a Senior Investigator for the New York City Civilian Complaint Review Board, where he investigated allegations of police misconduct.

Dan Caprio brings over 25 years of experience on legal and policy issues involving the convergence of Internet, telecommunications and technology. From 2004 to 2006, Mr. Caprio served as Chief Privacy Officer and Deputy Assistant Secretary for Technology Policy at the U.S. Department of Commerce (DoC) where he advised the Secretary of Commerce and the White House on technology policy and privacy protection. In 2010, Mr. Caprio was appointed as a transatlantic subject matter expert to advise the European Commission Expert Group on the Internet of Things. From 2007 through 2011, Mr. Caprio advised the Secretary of Homeland Security on Data Privacy matters. Prior to his tenure at the DoC, Mr. Caprio served as Chief of Staff to Commissioner Orson Swindle at the Federal Trade Commission. In 2002, he was appointed to represent the United States in revising the OECD guidelines on information systems and networks. Mr. Caprio holds an active security clearance for classified matters.

Michelle Chibba oversees the Policy Department and Special Projects at the Office of the Information and Privacy Commissioner of Ontario, Canada, which conducts research and analysis, while liaising with a wide range of stakeholders, to support the Commissioner's leadership role in proactively addressing privacy and access issues affecting the public. She has over two decades of professional experience, most of it in the public sector, where she managed several strategic policy projects. One of her many accomplishments was as Quality Manager for the Health Economic Development Unit, where she was instrumental in implementing a quality management system that was successfully registered to the ISO 9001 standard. For this, she received the Amethyst Award for Outstanding Public Service. She also is a recipient of an Ontario Ministry of Health and Long-Term Care ACE Award for achievement, commitment and excellence in Stakeholder/Partner Relations. Ms. Chibba received her M.A. from Georgetown University, with a focus on ethics and international business.

Stan Crosley is director of the Indiana University Center for Law, Ethics and Applied Research (CLEAR) in Health Information, counsel to Drinker Biddle & Reath, and a principal in Crosley Law Offices, LLC. He is the former CPO for Eli Lilly Company, where he initiated and directed Lilly's global privacy program for more than a decade, culminating in the program's receipt of the 2007 Innovation Award from the IAPP. Mr. Crosley also co-founded and served as chair of the International Pharmaceutical Privacy Consortium and was a

member of the IOM Medical Research and Privacy Committee. He serves on the boards of the Indiana Health Informatics Technology, Inc., the International Association of Privacy Professionals, and The Privacy Projects. Mr. Crosley is a member of the OECD Panel of Experts on Health Information Infrastructure, and a member of the Brookings Institute's Active Surveillance Implementation Council.

Jeff Hagins is the co-founder and CTO of SmartThings, which works to connect things in the physical world to the Internet. He is a "Cloud CTO" who strongly believes in the importance of Cloud-based services as an enabler of time-to-market, scalable architectures, improved and more mature service level agreements, and competitive advantage. Prior to founding SmartThings, Mr. Hagins spent more than 30 years in software engineering, engineering management, and executive technology leadership roles. Most recently, Mr. Hagins was CTO and CIO for ReachLocal. He has served as CTO for SMBLive, Dynix, Apptix, and TeleComputing. Mr. Hagins began his commercial software career in the ERP industry at J.D. Edwards and spent the first 13 years of his career at Lockheed.

Joseph Lorenzo Hall is the Chief Technologist at the Center for Democracy & Technology, where he focuses on the nexus between technology, law, and policy, working to ensure that technology and technical considerations are appropriately embedded into legal and policy environments. Mr. Hall was a founding member of the National Science Foundation's ACCURATE

Center and has served as an expert on independent teams invited by California, Ohio, and Maryland to analyze legal, privacy, security, usability, and economic aspects of voting systems. Mr. Hall is the Vice-Chairman of the Board of Directors of the California Voter Foundation, a member of the Board of Directors of the Verified Voting Foundation, and a member of the FCC's Computer Security, Reliability, and Interoperability Council IV. In 2012, Mr. Hall received the John Gideon Memorial Award from the Election Verification Network for contributions to election verification. He holds M.S. degrees in astrophysics and information systems from UC Berkeley and a Ph.D. in information systems from the UC Berkeley School of Information.

Craig Heffner is a Vulnerability Researcher with Tactical Network Solutions in Columbia, MD. He has six years' experience analyzing wireless and embedded systems and operates the devtys0 blog, which is dedicated to embedded hacking topics. Mr. Heffner has presented at events such as Black Hat and DEF CON and teaches embedded device exploitation courses. His skin has never been exposed to sunlight and is bioluminescent at 200 meters (656 feet) below sea level.

T. Drew Hickerson is Assistant General Counsel and Senior Director of Business Development at Happtique, a mobile solutions company that aims to help patients and providers integrate mobile health into clinical care and daily life. Prior to Happtique, Mr. Hickerson served as Assistant General Counsel at GNYHA Ventures, providing legal services for its portfolio companies,

and held various positions at Merrill Lynch & Co., Bloomberg LP, and Morrison & Foerster, LLP. Mr. Hickerson serves as Chair of the Application Developers Alliance's Health and Medical Apps Working Group, Appointed Member of the FDASIA Workgroup and the mHIMSS Advisory Council, and is a member of the Clinical Decision Support Coalition, and U.S. Department of Commerce's NTIA Privacy Multistakeholder Process Workgroup. Mr. Hickerson holds a B.A. in Political Science from Wake Forest University and a J.D. from the University of Miami School of Law.

Anand Iyer is President and COO of WellDoc Communications, Inc., where he oversees the company's mobile- and web-based chronic disease management platform and its integration into mainstream health management programs. He is the founder and past president of the In-Building Wireless Alliance and is adjunct faculty at the Institute for Defense and Business, where he teaches emerging wireless innovation to senior military officers in the United States Department of Defense. A Type 2 diabetes patient himself, Dr. Iyer is a consumer of WellDoc's innovations and speaks frequently on mobile health and its value proposition to the healthcare ecosystem. Dr. Iyer received a B.S. in electrical and computer engineering from Carleton University (Ottawa), an M.S. and Ph.D. in electrical and computer engineering, and an MBA from Carnegie Mellon University.

Widely known as one of the “Fathers of the Internet,” **Vinton (“Vint”) Cerf** co-designed the TCP/IP protocols and the architecture of the Internet. Currently, Cerf serves as vice president and chief Internet evangelist for Google where he is responsible for identifying new enabling technologies to support the development of advanced, Internet-based products and services.

He formerly served in several capacities at MCI, including senior vice president of Technology Strategy, senior vice president of Architecture and Technology, and vice president of Digital Information Services, where he led the engineering of MCI Mail, the first commercial email service to be connected to the Internet. Cerf also served as vice president of the Corporation for National Research Initiatives (CNRI) and worked with the U.S. Department of Defense’s Advanced Research Projects Agency (DARPA), where he played a key role leading the development of Internet and Internet-related packet data and security technologies.

Cerf holds several leadership positions in the technology community. In February 2013, President Obama appointed him to serve on the National Science Board. In addition, he currently is president of the Association for Computing Machinery (ACM) and is honorary Chairman of the IPv6 Forum, dedicated to raising awareness and speeding introduction of the new Internet protocol. He also serves as Vice

Chairman and Treasurer of the National Science & Technology Medals Foundation. Cerf is the Board Chairman of StopBadWare, Vice Chairman of the Marconi Society, and is a Board Director for the Americas Registry for Internet Numbers (ARIN), the Gorilla Foundation, and the Science Advisory Board for CosmosID. Cerf also serves on the Jet Propulsion Laboratory Advisory Committee, where, in his capacity as a distinguished visiting scientist, he is working on the design of an interplanetary Internet. Previously, Cerf served as Board Chairman of the Internet Corporation for Assigned Names and Numbers (ICANN) and was the founding president of the Internet Society, where he also served a term as Chairman of the Board. Cerf also served as a member of the U.S. Presidential Information Technology Advisory Committee (PITAC) and as Chair of the Visiting Committee on Advanced Technology of the U.S. National Institute of Standards and Technology. Cerf also sits on the Board of Associates of Gallaudet University.

Cerf has received numerous awards and commendations in connection with his work on the Internet. Among these are the Presidential Medal of Freedom, the U.S. National Medal of Technology, the ACM Alan M. Turing Award, the Japan Prize, the Queen Elizabeth Prize in Engineering, the Marconi Fellowship, the Charles Stark Draper Award of the National Academy of Engineering, the Prince of Asturias Award for Science and Technology, the Tunisian National Medal of Science, the St. Cyril and St. Methodius Order (Grand Cross) of Bulgaria, the Alexander Graham Bell Award presented by the Alexander Graham Bell Association for the Deaf, the NEC Computer and Communications Prize, the Silver Medal of the International Telecommunications Union, the IEEE Alexander Graham Bell Medal, the IEEE Koji Kobayashi Award, the ACM Software and Systems Award, the ACM SIGCOMM Award, the Computer and Communications Industries Association Industry Legend Award, the Yuri Rubinsky Web Award, the Kilby Award, the Rotary Club International Paul P. Harris Medal, the Joseph Priestley Award from Dickinson College, the Yankee Group/Interop/Network World Lifetime Achievement Award, the George R. Stibitz Award, the Werner Wolter Award, the Andrew Saks Engineering Award, the IEEE Third Millennium Medal, the Computerworld/Smithsonian Leadership

Award, the J.D. Edwards Leadership Award for Collaboration, the World Institute on Disability Annual award, and the Library of Congress Bicentennial Living Legend medal. Cerf was inducted into the National Inventors Hall of Fame in May 2006, was made an Eminent Member of the IEEE Eta Kappa Nu (HKN) honor society in 2009, and was made an officer of the French Legion d'Honneur in July 2013. He also received a Lifetime Webby Award, a lifetime achievement award from the Oxford Internet Institute, and was named a Stanford Engineering School "Hero" for his work on the Internet.

Cerf holds a B.S. in Mathematics from Stanford University, and M.S. and Ph.D. degrees in Computer Science from UCLA. He also holds several honorary Doctorate degrees. Cerf is a Fellow of the IEEE, ACM, and American Association for the Advancement of Science, the American Academy of Arts and Sciences, the International Engineering Consortium, the Computer History Museum, the Annenberg Center for Communications at USC, the Swedish Royal Academy of Engineering, the American Philosophical Society, the Hasso Plattner Institute and is a member of the US National Academy of Engineering. In 2011, he was made Distinguished Fellow of the British Computer Society.

David Jacobs is the Consumer Protection Counsel at the Electronic Privacy Information Center (EPIC). He focuses on representing consumers' privacy interests before Congress, in the courts, and before federal regulatory agencies. He is a graduate of the University of Wisconsin—Eau Claire and Harvard Law School. At Harvard, he was involved with the Cyberlaw Clinic at the Berkman Center for Internet and Society, and worked as a research assistant to Professor John Palfrey. Before joining EPIC, he clerked at the United States Department of Justice, the American Civil Liberties Union, and the United States Senate Subcommittee on Antitrust, Competition Policy and Consumer Rights.

Tadayoshi Kohno is an Associate Professor of Computer Science and Engineering at the University of Washington and an expert in computer security and privacy. Dr. Kohno is a past chair of the USENIX Security Symposium and is on the steering committees for the USENIX Security Symposium and the Network & Distributed System Security Symposium. He is the author of over 70 peer-reviewed research publications and co-authored the book *Cryptography Engineering*. Dr. Kohno also co-designed the *Control-Alt-Hack™* educational computer security card game. He has testified before the U.S. Congress on the topic of cyber-security and is profiled in a *NOVA ScienceNow* documentary entitled "Can Science Stop Crime?" He is a member of The Shmoo Group and has previously worked as a cryptography and computer security consultant with Counterpane Systems and Cigital. A recipient of an Alfred P. Sloan Fellowship, a U.S. National Science Foundation CAREER Award, and an MIT Technology Review TR-35 Young

Innovator Award, Dr. Kohno received his Ph.D. in computer science from the University of California at San Diego.

Eric Lightner is the Director of the Department of Energy's Federal Smart Grid Task Force and has been a program manager for advanced technology development at the agency for the last 23 years. Over the last decade, Mr. Lightner has focused on the modernization of the U.S. electric grid, conceiving of, and championing, the DOE smart grid program. His task force activities include smart grid research and development; development of smart grid standards and protocols; and the relationship of smart grid technologies to electric utility regulation, infrastructure development, system reliability, and security. In addition to directing the Federal Smart Grid Task Force, Mr. Lightner is facilitating the development of an industry-led Voluntary Code of Conduct for data privacy related to customer energy usage information and is leading several efforts regarding Smart Grid Customer Engagement. Mr. Lightner holds a B.S. in electrical engineering from the University of Maryland and a M.S. in electrical engineering from the Johns Hopkins University.

Keith Marzullo is the Division Director for the Computer and Network Systems Division in the Computer and Information Science and Engineering Directorate at the National Science Foundation. He is on leave from the Computer Science and Engineering (CSE) Department at the University of California, San Diego, which he joined in 1993. He received his Ph.D. in Electrical Engineering from Stanford University in 1984. He joined the CS

Department at Cornell University in 1986. He served as a Professor at Large in the Computer Science Department at the University of Tromsø from 1999-2003, was Chair of ACM SIGOPS from 2003-2007, and Chair of the CSE Department from 2006-2010. His current research focuses on issues in distributed systems and security. He is a Fellow of the ACM.

John Nielsen is the Managing Director of Automotive Engineering and Repair at AAA's National Office. With more than 25 years of experience in the automotive industry, Mr. Nielsen joined the AAA executive management team in 1998 as the director of the Approved Auto Repair network and has provided leadership around developing information and services that benefit members' use and enjoyment of their automobiles. Mr. Nielsen has held an ASE Master Automotive Technician certification, authored the book, *Making Sense of Car Care*, and provided technical support to numerous industry projects and government initiatives. He also serves as editor of AAA's new car and truck reviews, and is a regular guest on radio and TV shows throughout the country.

M-H. Carolyn Nguyen is a Director in Microsoft's Technology Policy Group, responsible for policy initiatives in data governance and personal data management. Her work is focused on shaping relevant long-term technology policies globally by engaging with stakeholders, and raising awareness of potentially disruptive impacts of emerging technologies, such as big data and the Internet of Things, on existing social, economic, and policy frameworks. Prior to joining Microsoft, Dr. Nguyen held a number of positions, including technology

research, new product/market development, and strategic initiatives, with Research in Motion, Avaya Communications, Lucent Technologies, and Bell Laboratories. She received her Ph.D. in Electrical Engineering from Columbia University, and completed Executive Business Management Programs at Harvard Business School and London Business School.

Scott Peppet is a Professor at the University of Colorado School of Law. He has written recently about the privacy implications of sensors and other technologies that permit easy self-disclosure and sharing of information; the implications of augmented reality for consumer contract law; and the consequences of technological innovation for banned markets such as prostitution. His current project—titled "Sensor Privacy"—focuses on the importance of the recent proliferation of biometric and other sensor data.

Kenneth Wayne Powell is the General Manager and Senior Executive Engineer of Electrical Systems at Toyota Technical Center (TTC), Toyota's North American R & D center, a division of Toyota Motor Engineering & Manufacturing, North America, Inc. Mr. Powell is responsible for the development of Multimedia and Telematics Systems for Toyota North America. Prior to joining TTC, Mr. Powell worked for the Ford Motor Company and Visteon Corporation. Mr. Powell received a M.S. in Technology Management from the University of Pennsylvania and a B.S. in Mechanical Engineering from MIT.

Jay Radcliffe is a Senior Security Analyst for InGuardians, Inc., and has been working in the computer security field for over twelve years. Coming from the managed security services industry, Mr. Radcliffe has used just about every security device made over the last decade. Recently, Mr. Radcliffe presented groundbreaking research on security vulnerabilities in medical devices at BlackHat and Defcon. Diagnosed with Type I Diabetes at 22, Mr. Radcliffe brings personal experience as a patient to his work on medical devices. Mr. Radcliffe holds an M.S. in information security engineering from SANS Technology Institute and a B.A. in criminal justice/pre-law from Wayne State University.

Marc Rogers is the Principal Security Researcher at Lookout, Inc., a mobile security company. His career in security spans over 30 years, and encompasses all domains, including IT security, security architecture, networking, and mobile. Mr. Rogers' core expertise is as a whitehat hacker, investigating and uncovering security issues before communicating them to consumers and industry in a responsible way (such as with his recent hack of Apple's TouchID). Previously, Marc oversaw threat intelligence for Vodafone in the UK and was Chief Security Officer for AIAM in South Korea. Marc also is Head of Security for DEF CON, the world's largest hacker's conference. One of his more notable contributions to the security industry is his work in creating and producing the award winning BBC series, *The Real Hustle*, which brings to life real-world security issues.

Lee Tien is a senior staff attorney with the Electronic Frontier Foundation (EFF), a non-profit public interest law firm, where he specializes in privacy and free speech law. Before joining EFF, Mr. Tien was a sole practitioner specializing in Freedom of Information Act litigation; currently, his focal areas are telecommunications privacy, cyber security, location privacy, medical privacy, and smart grid privacy. He has published articles on children's sexuality and information technology, anonymity, surveillance, and the First Amendment status of publishing computer software. Mr. Tien received his undergraduate degree in psychology from Stanford University. After working as a news reporter in Tacoma, Washington, he received his J.D. from the University of California at Berkeley.

Christopher Wolf is the Founder and Co-Chair of the Future of Privacy Forum (FPF) and leads the global privacy practice at Hogan Lovells US LLP. Through his work for FPF and law firm clients, Mr. Wolf recently has focused on the legal and policy issues arising from the Internet of Things, including connected cars, the Smart Grid, and in-store retail. Mr. Wolf writes and speaks frequently on privacy issues and is the creator of the first Practising Law Institute treatise on privacy law. He is a member of the American Law Institute and the ALI project on the Restatement of Privacy Law.

