

## 2019 Google Advanced Technology External Advisory Council (ATEAC)

The Google AI Principles are an ethical charter to guide the development and use of AI and advanced technologies in our research and products. In addition to internal governance structures for implementation, we have created an Advanced Technology External Advisory Council (ATEAC) to consider complex challenges and provide a diverse set of perspectives to inform our work. In 2019, we are honored to engage with the following experts in robust discussion of these important issues.



**Alessandro Acquisti** is a Professor of Information Technology and Public Policy at the Heinz College, Carnegie Mellon University, and the PwC William W. Cooper Professor of Risk and Regulatory Innovation. He is the director of the Peex (Privacy Economics Experiments) lab at CMU and a Carnegie Fellow (inaugural class). Alessandro investigates the economics of privacy. His research has spearheaded the investigation of privacy and disclosure behavior in online social networks, and the application of behavioral economics to the study of privacy decision making. His studies have won numerous awards and have been published in outlets across multiple fields, including economics, computer science, psychology, and marketing. His findings have been featured in international media outlets, including The Economist, NYT, Wall Street Journal, Washington Post, Financial Times, Wired, CNN, and 60 Minutes; his TED talks on privacy and behavior have been viewed over 1.3 million times. Alessandro holds a PhD from UC Berkeley, and Master degrees from Berkeley, LSE, and Trinity College Dublin.



**Bubacarr Bah** is a Senior Researcher, designated the German Research Chair of Mathematics with specialization in Data Science, at the African Institute for Mathematical Sciences (AIMS) South Africa and a Senior Lecturer (Asst. Professor) at the Division of Applied Mathematics, Department of Mathematical Sciences, Stellenbosch University. Prior to this he held postdoc positions at EPFL, Switzerland, and then at UT Austin, USA. He also held a Graduate Assistant position at University of The Gambia (UTG) prior to his graduate studies. His PhD degree is in Applied and Computational Mathematics from the University of Edinburgh, UK, his MSc degree in Mathematical Modelling and Scientific Computing from the University of Oxford, UK, and his BSc degree (summa cum laude) in Mathematics and Physics from UTG. He underwent teacher training (has a Higher Teachers' Certificate) at Gambia College and taught at secondary schools in The Gambia before his undergraduate studies at UTG.



**De Kai** is Professor of Computer Science and Engineering at the Hong Kong University of Science and Technology (HKUST), and Distinguished Research Scholar at Berkeley's International Computer Science Institute. He is among 17 scientists worldwide named by the Association for Computational Linguistics as a Founding ACL Fellow, for his pioneering contributions to machine learning foundations of machine translation. Recruited as founding faculty of HKUST directly from UC Berkeley, where his PhD thesis was one of the first to argue for the paradigm shift toward machine learning based natural language processing, he founded HKUST's internationally funded Human Language Technology Center which launched the world's first web translator over twenty years ago. De Kai's AI research focuses on natural language processing, language technology, music technology, and machine learning, and his cross-disciplinary work in language, music, and cognition centers on enabling cultures to relate. He holds a Kellogg-HKUST Executive MBA and a BS in Computer Engineering from UCSD.



**Dyan Gibbens** studied engineering, instructed skydiving, and learned to fly at the U.S. Air Force Academy. While serving as an Acquisitions Officer and engineer, she earned her MBA. Dyan then managed Air Force One and Global Hawk UAS engineering and logistics. Her graduate research in industrial engineering and management focused on unmanned systems (drones), RFID/wireless systems and computer vision/machine learning. Since 2013, Dyan has led Trumbull, a Forbes Top 25 veteran founded startup, focused on automation, data, and environmental resilience in energy and defense. In 2015, Fortune named Dyan as a woman shaping the drone industry. After supporting White House Drone Workshops during the Obama and Trump administrations, Dyan supported AI and the future of work at G7-17 as a U.S. delegate. In 2018, Dyan started the Autonomie Foundation focused on human-centered AI, digital ethics, and STEM and founded multiple drone scholarships. Entrepreneur recently recognized Trumbull in 100 Brilliant Companies.



**Joanna Bryson** is an Associate Professor (Reader) at the University of Bath. Bryson's first and third degrees were in Psychology (Chicago, Edinburgh), while her second and fourth were in Artificial Intelligence (Edinburgh, MIT), so she approaches AI from the perspective and for the purpose of understanding human behaviour. Before her postgraduate education she did programming and system administration in Chicago's financial industry, and has since consulted for a number of companies on AI, notably LEGO. Bryson has worked off and on in AI ethics since 1996, and helped author the UK research councils' Principles of Robotics in 2010. In the last two years she has consulted with the Swiss National Science Foundation and the Canadian Institute for Advanced Research on researching the impact of AI on society, the Red Cross on autonomous weapons, Chatham House on the impact of AI on the nuclear threat, and the British Parliament, the British Financial Conduct Authority, the European Parliament and Commission, the Council of Europe, and the OECD regarding the regulation of AI.



**Kay Coles James** has an extensive background in crafting public policy and leading in nearly every sector of America's economy. She has worked at the local, state, and federal levels of government under the administrations of former U.S. President George H. W. Bush, former Virginia Governor George Allen, and former U.S. President George W. Bush. She has also served dozens of organizations in the corporate and nonprofit arenas at the executive leadership and board levels. Today, Mrs. James is the President of The Heritage Foundation, a conservative think tank dedicated to formulating and promoting conservative public policies based on the principles of free enterprise, limited government, individual freedom, traditional American values, and a strong national defense. Mrs. James has also been a trustee of The Heritage Foundation for 12 years. Mrs. James is also the founder of The Gloucester Institute, an organization committed to providing young leaders an intellectually safe environment where ideas can be discussed and transformed into practical solutions that produce results. Most importantly, Kay Coles James is the wife of Charles James, Sr. and the proud mother of three grown children and five grandchildren.



**Luciano Floridi** is Professor of Philosophy and Ethics of Information at the University of Oxford, where he directs the Digital Ethics Lab of the Oxford Internet Institute, and is Professorial Fellow of Exeter College. He is also Turing Fellow and Chair of the Data Ethics Group of the Alan Turing Institute. His areas of expertise include digital ethics, the philosophy of information, and the philosophy of technology. Among his recent books, all published by Oxford University Press: *Information - A Very Short Introduction* (2010); *The Philosophy of Information* (vol. 1, 2011); *The Ethics of Information* (vol. 2, 2013); *The Fourth Revolution - How the infosphere is reshaping human reality* (2014); and *The Logic of Information* (vol. 3, 2019).



**William J. Burns** is president of the Carnegie Endowment for International Peace. He retired from the U.S. Foreign Service in 2014 after a thirty-three-year diplomatic career. He holds the highest rank in the Foreign Service, career ambassador, and is only the second serving career diplomat in history to become deputy secretary of state. Prior to his tenure as deputy secretary, Ambassador Burns served from 2008 to 2011 as undersecretary for political affairs. He was ambassador to Russia from 2005 to 2008, assistant secretary of state for near eastern affairs from 2001 to 2005, and ambassador to Jordan from 1998 to 2001. Ambassador Burns earned a bachelor's degree in history from La Salle University and master's and doctoral degrees in international relations from Oxford University, where he studied as a Marshall Scholar. He is the author of *The Back Channel: A Memoir of American Diplomacy and the Case for its Renewal* (Random House, 2019).