GUIRR Meeting: Artificial Intelligence at the Nexus of Collaboration, Competition, and Change

Government-University-Industry Research Roundtable October 10-11, 2023

Speaker Biographies

Keynote:



Miriam Vogel has extensive experience working with C-suite, board of directors and other key stakeholders to establish best practices for legal and regulatory compliance, as well as establishing responsible AI governance practices within Fortune 100 companies across multiple industry sectors. Miram is the President and CEO of EqualAI, a non-profit created to reduce bias and other harms in artificial intelligence (AI) and promote responsible AI governance. She also serves as Chair of the National AI Advisory Committee (NAIAC), mandated by Congress to advise the President and White House on AI policy. Miriam cohosts a podcast, InAI we Trust, with the World Economic Forum. Miriam has taught Technology Law and Policy at Georgetown University Law Center, where she currently serves as chair of the alumni board. Miriam also serves as a senior advisor to the Center for

Democracy and Technology (CDT).

Miriam has served in a variety of leadership positions across the U.S. government. Most recently, she served as Associate Deputy Attorney General at the Department of Justice (DOJ), where she advised the Attorney General and the Deputy Attorney General (DAG) on a broad range of legal, policy and operational issues. Under the direction of DAG Sally Yates, Miriam led the creation and development of the Implicit Bias Training for Federal Law Enforcement. Miriam also spearheaded the DOJ's Intellectual Property (IP) efforts to identify and dismantle IP theft domestically and internationally and worked with the DAG to manage DOJ divisions' multibillion-dollar budgets, resolve high-level challenges, and represented DOJ in meetings with the White House, Congress and other officials on high level policy initiatives and oversight matters.

Miriam served in the White House in two Administrations, including as the Acting Director of Justice and Regulatory Affairs. She led the President's Equal Pay Task Force to promote equality in the workplace. She also advised White House leadership on initiatives ranging from women, LGBT, economic, regulatory and food safety policy to criminal justice matters.

When practicing law, Miriam served as General Counsel to West Exec Advisors and Associate General Counsel at Dana-Farber Cancer Institute. Prior to that, she practiced entertainment/corporate transactional law at Sheppard Mullin in Los Angeles, CA. Miriam began her legal career as a federal clerk in Denver, Colorado after graduating from Georgetown University Law Center and is a third generation alumna from the University of Michigan.

Panel 1:

Dan Adelstein is a native of Rapid City, SD. After graduating from the United States Military Academy in 1977, he served 25 years as a U.S. Army infantry and Special Forces officer. He is a graduate of the U.S. Army Infantry Officer Basic Course, Airborne School, Ranger School, Special Forces Officer Course, Armor Officer Advanced Course and Command & General Staff College. His military assignments were primarily Special Forces to include tours at Fort Bragg, NC; Fort Campbell, KY and in Germany. After retiring from the Army in 2003, he served as defense policy advisor for three members of the House of Representatives and Senator Pat Toomey (R-PA). He currently serves as National Security Advisor for Senator Mike Rounds (R-SD). Dan and his wife Judy reside in Kensington, MD.



Joel Burke is a fellow in the office of Senator Mike Rounds, focused on AI. Previously, he worked in a variety of roles and geographies including in Tallinn as Head of Business Development for e-Residency, the Republic of Estonia's flagship digital initiative. Other experiences include working as a fellow in Cameroon staffed to a local startup via Venture for Africa; serving as a NYCx Fellow; working as a Partner at Tribe.AI, a managed marketplace for top AI talent; and leading a venture for a Rocket Internet AG subsidiary in Berlin. He started his career at a YC and Andreessen Horowitz backed startup. Joel is passionate about maximizing impact and likes operating at the intersection of tech, national security, and American dynamism.



Max Katz is a Legislative Fellow in Senator Martin Heinrich's office, where he works on science, technology, and energy policy issues. He assists the Senator in his work as co-chair of the Senate Artificial Intelligence Caucus. Prior to that, Max was a Senior Solutions Architect at NVIDIA, where he worked with the Department of Energy and other U.S. government organizations on the deployment of their supercomputing systems. Max holds a Ph.D. in physics from Stony Brook University.



Rick Stevens is a Professor of Computer Science at the University of Chicago as well as the Associate Laboratory Director of the Computing, Environment and Life Sciences (CELS) Directorate and Argonne Distinguished Fellow at Argonne National Laboratory. In these, and in numerous other roles, he is responsible for ongoing research in the computational and computer sciences from high-performance computing architecture to the development of tools and methods for bioinformatics, cancer, infectious disease, and other challenges in science and engineering. Recently, he has focused on developing AI methods for a variety of scientific and biomedical problems, and also has significant responsibility in delivering on the U.S. national initiative for Exascale computing and the Argonne AI for Science initiative.

Currently, Stevens is the PI of the Bacterial / Viral Bioinformatics Resource Center (BV-BRC) which is developing comparative analysis tools for infectious disease research and serves a



large user community; the Exascale Deep Learning and Simulation Enabled Precision Medicine for Cancer project through the Exascale Computing Project (ECP) which focuses on building a scalable deep neural network application called the CANcer Distributed Learning Environment (CANDLE) and recently earned a 2023 R&D100 Award; the Innovative Methodologies and New Data for Predictive Oncology Model Evaluation (IMPROVE) project which is building a comprehensive framework and exascale workflow to compare deep learning models that are aimed at solving critical problems; and the Exploration of the Potential for Artificial Intelligence and Machine Learning to Advance Low-Dose Radiation Biology Research (RadBio-AI) project to investigate the opportunity of understanding the impact of low doses of radiation on biological systems, including humans.

Stevens is a Fellow of the American Association for the Advancement of Science and a Fellow of the Association of Computer Machinery (ACM).

Panel 2:



Susan Ariel Aaronson is a research professor of international affairs, director of the Digital Trade and Data Governance Hub, and co-PI of the NISt-NSF Trustworthy AI Institute for Law and Society, where she directs work on data and AI governance. Aaronson conceived of and directs the Digital Trade and Data Governance Hub. Since 2019, the Hub has educated policymakers, the press and the public about data governance and data driven change. The Hub is also the only organization in the world that maps the governance of public, proprietary, and personal data at the domestic and international levels. The Hub's research has been funded by foundations such as Ford and Minderoo.

Aaronson is also a cross-disciplinary fellow and affiliate at GW's Institute for International Economic Policy, the Institute for International Science and Technology Policy and the Sigur Center for Asian Studies Since 2017, Aaronson is also senior fellow at the think tank Center for International Governance Innovation (GIGI) in Canada where she publishes much of her research on data driven change and data governance.

As co-PI at NSF TRAILS, Aaronson is correctly directing projects on mapping data sharing and the gaps in data governance for large language models. She is also writing on the policy response to generative AI; XR competitiveness, the need for empathy in AI; and how AI is changing international trade.

Dr. Aaronson is a frequent speaker and writer on international economic developments. She regularly writes op eds for Barron's. Aaronson has commented on economics on "Marketplace, "All Things Considered," Morning Edition," NBC, CNN, the BBC, and PBS. Previously, Aaronson was a Guest Scholar in Economics at the Brookings Institution (1995–1999); and a Research Fellow at the World Trade Institute 2008-2012. Aaronson was also the Carvalho Fellow at the Government Accountability Project and the Minerva Chair at the National War College. She has served on the Business and Human Rights Advisory Board at Amnesty International and the Advisory Board of Human Rights Under Pressure, a joint German and Israeli initiative on human rights. In her spare time, she likes to do ballets and triathlons.



Jacqueline "Jackie" Acker is Deputy Privacy and Civil Liberties Officer at CIA. Ms. Acker started at CIA in 2013, serving in data management roles in the Office of General Counsel and Information Management Services before working in the Office of Public Affairs as CIA's Loaned Executive for the Combined Federal Campaign.

Ms. Acker has served with the Office of Privacy and Civil Liberties since 2018. She has held a variety of positions, including Associate Privacy and Civil Liberties Officer and now Deputy Privacy and Civil Liberties Officer.

Ms. Acker graduated from the University of Tulsa in 2013 with a Juris Doctorate with a Health Law Certificate after receiving a Bachelor of Fine Arts from the University of Texas at Austin in Theater with a focus in scenic design.

Ms. Acker has received numerous awards during her time at CIA, including the Federal Privacy Council's Award for Excellence, which she received for her trailblazing work on the IC AI Ethics Framework. She received a previous award from the Federal Privacy Council for Exceptional Contributions in Advancing Agency Privacy Missions for her work developing Constitution Day training shared across the government. Additionally, Ms. Acker was named the IC Civil Liberties, Privacy, and Transparency Officer of the Year in 2020. She also cofounded the Agency Resource Group CIA Generations Council. Ms. Acker holds a Green Belt in Lean Six Sigma and is a Certified Information Privacy Professional through the International Association of Privacy Professionals.

Jackie is an accomplished painter and has a mini schnauzer named Blue Bell she enjoys hiking with.



Stephanie Nguyen was named <u>Chief Technology Officer</u> on October 3, 2022, after having served in the role in an acting capacity since October 2021. She brings over a decade of leadership building and designing technical products and services across government, academia, civil society, and the private sector, specializing in human-computer interaction design and user experience research. Prior to her tenure at the FTC, Nguyen worked at the U.S. Digital Service at the White House and as a research scientist at the Massachusetts Institute of Technology. Nguyen holds an MPP from Harvard Kennedy School, where she studied as a Gleitsman Scholar, and earned her B.A. in Digital Media Theory & Design from the University of Virginia.



Elham Tabassi is a Senior Research Scientist at the National Institute of Standards and Technology (NIST) and the Associate Director for Emerging Technologies in the Information Technology Laboratory (ITL). She also leads NIST's Trustworthy and Responsible AI program that aims to cultivate trust in the design, development, and use of AI technologies.

As the ITL's Associate Director for Emerging Technologies, Elham assists NIST leadership and management at all levels in determining future strategic direction for research, development, standards, testing and evaluation in the areas of emerging technologies such as artificial intelligence. She also coordinates interaction related to artificial intelligence with the U.S. research community, U.S. industrial community,

international standards community, and other federal agencies; and provides leadership within NIST in the use of



AI to solve scientific and engineering problems arising in measurement science and related use-inspired applications of AI.

Elham has been working on various machine learning and computer vision research projects with applications in biometrics evaluation and standards since she joined NIST in 1999. She is a member of the National AI Resource Research Task Force, vice-chair of OECD working party on AI Governance, Associate Editor of IEEE Transaction on Information Forensics and Security, and a fellow of Washington Academy of Sciences.

Panel 3:



Tess Deblanc-Knowles serves as Staff Associate for Technology Policy and Strategy at the National Science Foundation, where she is leading development of a strategic roadmap for the Foundation's new directorate for Technology, Innovation, and Partnerships. She recently concluded a two-year assignment as Senior Policy Advisor to the National AI Initiative Office of the White House Office of Science and Technology Policy (OSTP). While at OSTP, she led the National AI Initiative Office's policy efforts to strengthen the AI innovation ecosystem and co-chaired the National AI Research Resource Task Force. She also led the development of the National Strategy to Advance Privacy Preserving Data Sharing and Analytics and the National AI Research and Development Strategic Plan: 2023 Update. Before joining NSF, Tess served as Director for Research and Analysis at the National Security

Commission on Artificial Intelligence (NSCAI). She has also spent time as Chief of Staff at the Atlantic Council, at U.S. Special Operations Command, and in the Office of the Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction.



Edward Margerrison is the Director for the Office of Science and Engineering Laboratories (OSEL) at the Center for Devices and Radiological Health, U.S. FDA. The Office is responsible for providing technical expertise and analyses in support of the regulatory processes within CDRH. In addition, the 300 scientists and engineers engage in representing the Agency on International standards organizations, provide scientific guidance for policy, and "futureproof" the Center for technologies making their way into novel medical devices.

Previously, Dr. Margerrison was President and CEO of Ortho Regenerative Technologies, a biotech startup based in Montreal, developing novel biomaterial approaches to surgical soft tissue repair. During this appointment, Ed steered the

company to listing on the Canadian stock exchange, and started the regulatory process for the technology with the Center for Biologics at FDA.

He has also held senior positions at Zimmer Biomet (Vice President of Biologics), where he was primarily responsible for the cartilage repair business, resulting in the division becoming Zimmer's Business Unit of the Year for 2014, and other positions in both the pharmaceutical (Akela Pharma) and Orthopedics (Smith & Nephew) industries.

He graduated in Biochemistry from the University of Oxford and gained his PhD in Molecular Genetics from St George's Hospital Medical School in London UK, where he studies the mechanisms of resistance to quinolone antibiotics.



Michael Richards is director of policy at the U.S. <u>Chamber of Commerce Technology Engagement Center</u> (C_TEC). He manages the Chamber's artificial intelligence and IT modernization work, which analyzes federal artificial intelligence, facial recognition, and IT modernization policy impacting U.S. businesses. Richards also directs the Chamber's AI Policy Working Group, which comprises over 100 companies and trade associations, which has developed AI principles.

Before joining the Chamber, Richards served as deputy chief of staff and legislative director for Rep. Scott Franklin (FL-15) and served in the same role for Rep. Pete Olson (TX -22) before his retirement. Richards was the lead staffer for Olson's work

as co-chair of the House AI Caucus and the Victims' Rights Caucus. He also handled the Communication & Technology portfolio for the congressman within the Energy and Commerce Committee.

Richards earned his undergraduate degree at Texas State University and his Master of Public Policy from Pepperdine School of Public Policy.



Alexander Titus is a technologist working at the intersection of machine learning, software engineering, and biotechnology, focused specifically on understanding the paradigms of life in biological systems using modern computing tools, and the opportunity/risk trade-offs of the intersection of artificial intelligence and biology. Titus' work focuses on studying generative biology systems that embed security by design paradigms into the system itself. His work ranges from developing new algorithms to study fundamental biology to understanding the functional relationship between biotechnology and new product development. Titus is the former principal director for biotechnology within the office of the CTO at the Department of Defense, where he led the team developing the first enterprise biotechnology modernization strategy for the DoD, and is currently a Commissioner

on the National Security Commission on Emerging Biotechnology (NSCEB). Titus holds a PhD in Machine Learning and Genomics from Dartmouth College, as well as bachelor's degrees in biology and biochemistry from the University of Puget Sound.

Panel 4:



Edward Preble is a Director of Data Science at RTI International's Center for Data Science. In this role, he applies machine learning, predictive modeling, and text analytics techniques to address challenges across the social sciences, public health, and engineering fields. Dr. Preble collaborates closely with experts across various domains at RTI to extract valuable insights from complex datasets using advanced analytics.

His specific areas of expertise in data science include analyzing wearable sensor data and creating time series models for various medical purposes, such as identifying seizures, assessing traumatic brain injuries, and detecting respiratory illnesses. He also uses computer vision techniques for object detection in drone and satellite imagery as well as for quantitative image analysis to detect aerosols on human subjects. Dr. Preble also has experience with justice and law enforcement data, including body-worn camera metadata, analysis of mail-fraud victim populations, and the examination of the national incident-

based reporting system (NIBRS).

Dr. Preble holds a Ph.D. in Materials Science and Engineering from North Carolina State University (NCSU). Additionally, he earned an M.S. in Analytics from the Institute of Advanced Analytics at NCSU, an M.S. in Nuclear Engineering from NCSU, and a B.S. in Mechanical Engineering from Worcester Polytechnic Institute.



patents.

Navjot Singh is a Senior Partner in McKinsey's Boston Office with over 22 years of experience. Prior to McKinsey, Nav was an Executive at General Electric. Over time he has held multiple roles at McKinsey including serving as the Office Managing Partner for Boston from 2012-2021, leader of the State and Local practice in North America, leader of the Global Innovation practice, leader of McKinsey Center of Government and being a part of the Firm's Knowledge and Technology Councils. He has also been intimately in the COVID-19 response work across multiple clients. He currently sponsors Global Talent Attraction and is now a member of the McKinsey Global Institute (MGI) council, which advises on MGI research for global economic, business, and technology trends. Nav brings deep business expertise in strategy, innovation, operations, transformations, M&A, business development, and risk to all his client engagements. An expert in the use of Six Sigma methodologies for product development and process design, Nav holds 20

He has served as the Chair of the Board for the Greater Boston Chamber of Commerce. He is a Trustee at Museum of Science and Worcester Institute of Technology. He is a member of the Board of the Mass High Tech Council and on the Dean's Advisory Board for University of Minnesota. He also hosts Imagine Get-Togethers that convene cross-sector leaders on cutting-edge topics, such as synthetic biology, commercial applications of drones, the future of space exploration, and the impact of aging. He has been recognized as the Top Influential people in Boston twice by the Boston Business Journal.

Before joining McKinsey, in 2001, Nav was a laboratory manager at General Electric, where he helped to design manufacturing processes and to develop new polymetric materials and nanomaterials. He has a PhD in Chemical Engineering from University of Minnesota, MBA from Rensselaer Polytechnic Institute and a B.Tech from Indian Institute of Technology, Delhi.



Anshul Sonak is the Principal Engineer and Global Director—Digital Readiness Programs Strategy, at Intel Corporation, based in USA Headquarters, Santa Clara. He manages worldwide Intel® Digital Readiness Program strategy and execution for tech skilling, workforce preparation, future of work, policy initiatives to democratize AI, and other emerging tech skills. He is a pioneer who started responsible AI skilling scale models for the citizens, students, current & and future workforce, and leaders through public-private partnerships with government-academia worldwide in 2018. He steers Intel's digital inclusion commitment to make technology and expand digital readiness, as part of RISE 2030 goals. He had earlier designed and executed multiple large-scale innovative digital skilling programs for Intel.

He is a recognized global business and thought leader in the technology and education-skills industry. In May 2023, he was recognized as "The top 10 most inspiring education leaders 2023" by The Education Insights Magazine and featured on the cover page. His work is covered in a Harvard Business case study for transforming AI education through Intel AI for Youth. He has written on platforms such as Forbes, and UNDP, and he speaks regularly to media (e.g. Houston Business Journal) and in multilateral and academic forums. He is a technology policy advisor for multiple governments, civil society organizations, and academic bodies. He worked with UNESCO to publish K12 AI curricula mapping for countries wanting to introduce AI in schools. He has authored a chapter on "Mastering the power of creative thinking" in a new book by Oxford Professors titled "Mastering the Power of You". He is UNDP Asia's first private-sector regional Youth Co-Lab champion promoting youth tech-entrepreneurship and a global judge for MIT SOLVE, a world-leading social entrepreneurship challenge to solve pressing problems using technology.

In his 28-year-long career, he has played leadership roles like Business Head for India's number 1 IT Education company, Corporate President for a global ed-tech B2G company, Asia Head for digital inclusion & Education business, Corporate and Government Affairs Lead, Technology Policy & Sustainability expert, and Corporate Citizenship – CSR/ESG lead. He has led both for-profit and nonprofit education initiatives.

He is an alumnus of the Oxford Advanced Management & Leadership Program. He holds MIT Sloan School of Management certificates on "AI – Implications for Business Strategy" with MIT CSAIL (Computer Science & Artificial Intelligence Lab) and on "Shaping The Future Of Work" with MIT IWER (Institute for Work and Employment Research). He is a Post-Graduate in Rural Management from IRMA (Institute of Rural Management) India. He has lived earlier in India, Dubai (UAE), Kuala Lumpur (Malaysia), and Singapore.