Accelerating Climate Progress with AI: From Science to Action Workshop

January 13-14, 2026

Planning Committee Member Biographies

Stephan Sain (chair)

Senior Principal Data Scientist & Senior Director, Jupiter Intelligence

Stephan Sain is a Senior Principal Data Scientist and Senior Director at Jupiter Intelligence, where he heads the data sciences and is responsible for operational aspects of the broader Jupiter science organization. Jupiter provides data and analytics services to better predict and manage risks from weather and sea level rise, storm intensification and changing temperatures caused by medium- to long-term climate change. Steve is an experienced data science leader and applied statistician who has long worked at the intersection of climate research, applied statistics, and machine learning, including a focus on spatial methods for large datasets, extremes, uncertainty quantification, and climate risk analytics. From 2006 to 2014, he was the head of the Geophysical Statistics Project and a scientist in the Institute for Mathematics Applied to Geosciences at the National Center for Atmospheric Research in Boulder, Co. Steve is a Fellow of the American Statistical Association (ASA). He is a past recipient of the Distinguished Achievement Award from the American Statistical Association's Section on Statistics and the Environment. Steve also serves as chair for the ASA's newly formed Caucus of Industry Representatives, is a past member of the ASA's committee on climate change policy, is an affiliate faculty in the University of Colorado's Department of Applied Mathematics, and is a member of the advisory board for the Institute for Mathematical and Statistical innovation (IMSI) at the University of Chicago.

Katherine Dagon

Research Scientist, National Science Foundation National Center for Atmospheric Research

Dr. Katie Dagon is a research scientist at the National Science Foundation National Center for Atmospheric Research (NCAR) in Boulder, Colorado, working in the Climate and Global Dynamics Laboratory. Her research focuses on modeling the impacts of climate change on land-atmosphere interactions and climate variability. She applies machine learning approaches to climate data to detect extreme weather events, understand climate predictions, and quantify uncertainty in model projections of climate change. From 2017-2019 she was an Advanced Study Program postdoctoral fellow at NCAR. Katie obtained her Ph.D. in Earth and Planetary Sciences from Harvard University in 2017 and her B.S. in Mathematics-Physics from Brown University in 2010.

Leila Doty
Privacy and AI Analyst, City of San José
Leila Doty is an advocate for and architect of public policy that promotes the responsible design, development, and use of technology. Her work is motivated by a deep concern for the harmful consequences technology often inflicts on vulnerable communities, and she is critically hopeful that a more just technological future for all is within reach. Leila currently serves as a privacy and AI analyst with the City of San José. Since joining the City in 2022, Leila has made a lasting impact on how it procures and governs AI systems. Notably, she created the City's framework for governing AI systems via the public procurement process and wrote its landmark AI policy. Her work serves as the foundation for the GovAI Coalition, a growing collective of over 250 public agencies across the country established and led by her team at San José.

Kaiyu Guan
Levenick Endowed Professor & Founding Director, University of Illinois Urbana-Champaign Agroecosystem Sustainability Center
Dr. Kaiyu Guan is a Levenick Endowed Professor and the Founding Director of Agroecosystem Sustainability Center at the University of Illinois Urbana-Champaign. He studies the underlying processes of plant-water-nutrient interactions for agricultural ecosystems in a changing climate. His team has developed revolutionary sensing, modeling, and AI technologies for monitoring and assessing field-level agricultural productivity and ecosystem service at scale, with the aim of increasing societal resilience and environmental sustainability.

Lynn Kaack
Assistant Professor of Computer Science and Public Policy, Hertie School
Lynn Kaack is Assistant Professor of Computer Science and Public Policy at the Hertie School, where she leads the AI and Climate Technology Policy Group. Her research and teaching focuses on methods from statistics and machine learning to inform climate mitigation policy across the energy sector, and on climate-related AI policy. She is a co-founder and chair of Climate Change AI, which is an organization to facilitate work at the intersection of machine learning and climate action, and Associated Researcher at the Einstein Center Digital Future in Berlin. Previously she was Postdoctoral Researcher and Lecturer in the Energy Technology and Policy Group at ETH Zürich.

Amy Luers
Senior Global Director for Sustainability Science and Innovation, Microsoft
Dr. Amy Luers is the senior global director for sustainability science and innovation at Microsoft. In this role she leads Microsoft's artificial intelligence and sustainability work, and informs the company's sustainability strategies, investments, and policies. Previously, she served as executive director of Future Earth, assistant director for climate resilience and information at the White House Office of Science and Technology Policy during the Obama administration, director of climate at the Skoll Global Threats Fund, and senior environment manager at Google. Dr. Luers spent the first decade of her career working in Latin America, where she co-founded Agua Para La Vida, a nonprofit organization that works with rural communities to enhance access to potable water. Currently, she serves on the advisory board of Veolia Institute, the Stanford Woods Institute for the Environment, and the Gund Institute for Environment. Dr. Luers is a member of the Council on Foreign Relations. She has a Ph.D. in environmental science and an M.A. in international policy studies from Stanford University, B.S. and M.S. degrees in environmental systems engineering from Humboldt State University, and a B.A. in philosophy from Middlebury College. She has published widely on topics including societal vulnerability and resilience, climate impact and policy, science communication, and digitalization and sustainability.

Soheil Salehian
Machine Learning Engineering & Forest Conservationist, Planet Reimagined
Soheil is a machine learning engineer and forest conservationist who works at the intersection of technology and environmental protection. His focus centers on building tools that serve communities on the ground, particularly in areas involving environmental data, indigenous rights, and human rights. With a Computer Engineering and Computer Vision Engineering degree from the University of Calgary and graduate studies in Tropical Forest Conservation from Yale School of the Environment, he brings both technical and environmental expertise to his work. His career has spanned engineering roles at Intel and startup ventures, where he has collaborated with teams passionate about using technology to create meaningful impact.

Adrienne Wootten
Research Scientist, University of Oklahoma
Dr. Adrienne Wootten is a research scientist who specializes in downscaling and climate modeling, the uncertainty and accuracy associated with the appropriate use of climate projections and data impact assessments and planning. Additionally, she helps stakeholders with technological assistance and the appropriate use of climate projections for decision making processes. She received her B.S. in Meteorology with a minor in statistics, M.S. and Ph.D. in Atmospheric Science from North Carolina State University.

Workshop Speaker and Moderator Biographies

Marc Alessi

Science Fellow, Union of Concerned Scientists

Marc Alessi is a Science Fellow focusing on climate attribution science with the Climate & Energy program at the Union of Concerned Scientists. In his role, he primarily uses a machine learning approach to improve climate attribution science methods to inform loss and damage funding. His background is in studying the physics of climate change through climate model data, simple approximations of the climate system, and machine learning. During his Ph.D., he analyzed how different patterns of ocean surface temperature affect the rate of global warming. He helped lead an intercomparison project among the world's top climate modeling centers, and also led a project on attributing drought to changes in the evolution of soil moisture. He was previously awarded a German Academic Exchange Service (DAAD) research fellowship to conduct research at the Max Planck Institute in Hamburg, Germany, and he represented Cornell University and UCS at UNFCCC COPs in 2017 and 2024. Dr. Alessi was an organizer of the 100-hour Weather & Climate Livestream, which brought attention to the federal government's potential cuts to climate and weather research. In 2025, he was awarded a UCS Science Defender Award for his work for the livestream and on other projects in communicating the importance of weather and climate research. Dr. Alessi earned a Ph.D. in atmospheric science from Colorado State University, and an M.S. and B.S. in atmospheric science from Cornell University. He has been quoted in ABC, NBC, Reuters, USA Today, AP, and other major news outlets.

Mariela Alfonzo

Founder & CEO, State of Place

Bridging academia, practice, and entrepreneurship, Dr. Mariela Alfonzo is a scholar-practitioner with 25+ years' experience in the nexus of urban design, behavior, and the quadruple-bottom line. Her work quantifies how the built environment influences feelings, perceptions, and choices, and how that translates into economic, social, health, and environmental outcomes. She is the Founder and CEO of State of Place, a software company that uses AI and proprietary hardware to extract data on 150+ street-level built environment features and generate predictive models linking urban design to quality-of-life outcomes. The software recommends what and where to invest to optimize those outcomes (e.g., real estate value, chronic diseases, climate-related performance, transportation modes and safety, etc.) and lets users test scenarios and forecast their benefits to facilitate approvals, funding, and buy-in. State of Place has worked with 50+ cities and developers in the U.S., Europe, and Asia. Dr. Alfonzo is an Urban Land Institute 40 Under 40, a New Cities Foundation Placemaking Fellow, a Fulbright Scholar, and recipient of the Dale Prize in AI in Urban Planning. She is a Research Professor at NYU Tandon with a Ph.D. and MURP from UC Irvine and a B.A. in Psychology and Architecture from University of Miami.

İlkay Altıntaş

Chief Data Science Officer, San Diego Supercomputer Center, and Workflows for Data Science Center of Excellence, and Founder & Director, WIFIRE Lab

Dr. İlkay Altıntaş is the Chief Data Science Officer and the Founding Director of the Workflows for Data Science (WorDS) Center of Excellence and WIFIRE Lab at the San Diego Supercomputer Center, UCSD. She has worked on different aspects of scientific workflows as a principal investigator and in other leadership roles across a wide range of cross-disciplinary projects. She is a co-initiator of and an active contributor to the open-source Kepler Scientific Workflow System.

Elizabeth Barnes
Dalton Family Chair & Professor of Computing & Data Science, Boston University
Dr. Elizabeth (Libby) Barnes is the Dalton Family Chair in Environmental Data Science & Sustainability and Professor of Computing & Data Sciences and of Earth & Environment at Boston University. Her group's research focuses on understanding Earth system variability, predictability, and change across time and space, with an emphasis on developing and implementing artificial intelligence tools in a way that mimics scientific human reasoning to improve intrinsic interpretability. An overarching research goal of her group is to responsibly harness AI to anticipate human-Earth system futures in support of a thriving society in the decades ahead. She teaches graduate courses on statistical analysis, machine learning for the Earth sciences, and data-driven forecasting across timescales from days-to-decades. Libby is a Fellow of both the American Geophysical Union (AGU) and the American Meteorological Society (AMS). She was awarded the Presidential Early Career Award for Scientists and Engineers (PECASE) by President Biden in January of 2025 and was the recipient of the American Geophysical Union (AGU) Macelwane Medal in 2021. S Libby is involved in a number of research community activities, including serving on the National Academies' Board on Atmospheric Science and Climate and the NCAR Earth System Predictability Across Timescales External Advisory Board, and being a funded member of the NSF AI Institute for Research on Trustworthy AI in Weather, Climate and Coastal Oceanography (AI2ES), among others.

Emma Bassein
Head of Sustainability, John Deere
Emma Bassein is the Head of Sustainability Solutions at John Deere, which builds customer-facing solutions to support our growers that are on the journey towards regenerative agriculture, including connecting them to financial support, agronomic advice, and digital insights on their operations. Emma has previously held a number of leadership roles in sustainability, data science, and software development. Emma holds a bachelor's degree in Earth, Atmosphere, and Planetary Science from MIT and a master's degree in environmental engineering from Princeton.

Chris Belasco
Senior Manager of Digital Services & Chief Data Officer, City of Pittsburgh Department of Innovation and Performance
Chris Belasco is the Senior Manager, Digital Services and Chief Data Officer for the City of Pittsburgh in the Department of Innovation and Performance, where he manages analytic, data engineering, and software development efforts to improve decisions about City operations and planning. He is an Adjunct Professor at the Graduate School of Public and International Affairs at the University of Pittsburgh. Previously he ran a unit at the University of Pittsburgh that conducted large impact evaluations on democracy and governance foreign assistance for the United States Agency for International Development. Chris received his Ph.D. in Public and International Affairs, Master of Public and International Affairs, B.S. in Information Science, and B.A. in Sociology from the University of Pittsburgh. He is an Advisory Board member for the Responsible Data Science Initiative at the University of Pittsburgh. Chris was named the 2024 Rising Star by the Pittsburgh Technology Council at the CIO of the Year event and helped steer the City to Gold Certification from What Works Cities. During his spare time, he likes to cook, travel, cycle, and visit museums with his wife and two daughters. A 25-year resident of the Bloomfield neighborhood, he can often be found working to restore his old house.

F. Paul Bertetti

Senior Director of Aquifer Science Research and Modeling, Edwads Aquifer Authority

Mr. F. Paul Bertetti, P.G., is the Senior Director of Aquifer Science Research and Modeling at the Edwards Aquifer Authority (EAA) where he oversees the development and implementation of the EAA's research program and aquifer modeling activities. The Edwards Aquifer is a complex and prolific karst aquifer system in south-central Texas. EAA's research topics are varied and include quantifying effects of enhanced land management on recharge and water quality, assessing the vulnerability of the aquifer to potential contaminants, and evaluating the resiliency and sustainability of the aquifer in times of drought. For more than 30 years, Mr. Bertetti has worked as a research scientist investigating a wide range of topics related to the hydraulics and geochemistry of complex regional aquifer systems such as the Edwards, Carrizo-Wilcox, and Trinity aquifers. He has also conducted numerous field, laboratory, and modeling studies to examine the sorption, ion-exchange, and transport behavior of dissolved radionuclides and other constituents related to the disposal of high-level nuclear waste. Mr. Bertetti holds B.S. and M.S. degrees in geology from the University of Texas at San Antonio and is a licensed professional geoscientist in Texas.

Kathleen Boomer

Scientific Program Director, Foundation for Food & Agriculture Research

Dr. Kathleen (Kathy) Boomer is a Scientific Program Director at the Foundation for Food & Agriculture Research (FFAR), where she develops programs within the Sustaining Vibrant Agroecosystems Research Priority Area, with a focus on sustainable water management. She brings extensive experience in landscape modeling and watershed science to advance decision-relevant climate and hydrology information for water and food security. Before joining FFAR in 2019, Dr. Boomer served as Lead Watershed Scientist for The Nature Conservancy's Chesapeake Bay Project, leading stakeholder-driven research partnerships to identify conservation practices for agricultural and urban soil and watershed health. She has also worked internationally as a monitoring consultant in China with the Food and Agriculture Organization of the United Nations and earlier as a geospatial ecologist with the Smithsonian Environmental Research Center, studying ecosystem services across terrestrial, wetland, and coastal systems. She previously served on the Executive Board of the U.S. EPA Chesapeake Bay Program's Scientific and Technical Advisory Committee, focusing on watershed modeling and monitoring. Dr. Boomer earned her B.S., M.S., and Ph.D. from Cornell University.

Debaditya Chakraborty

Associate Professor, University of Texas – San Antonio

Debaditya Chakraborty is an Associate Professor in the School of Civil & Environmental Engineering and Construction Management at the University of Texas at San Antonio, where he leads interdisciplinary research at the intersection of climate science, hydrology, artificial intelligence, and biomedical data science. His work focuses on developing physics-informed, explainable, and causal AI frameworks to improve understanding, prediction, and decision-making in complex systems under uncertainty. In environmental and water systems, Dr. Chakraborty integrates large-scale climate datasets, numerical hydrologic models, and advanced AI methods - including generative AI, explainable AI, and counterfactual modeling - to identify inflection points, evaluate mitigation strategies, and support groundwater sustainability and drought resilience. He works closely with water managers to translate AI-driven insights into actionable, decision-relevant guidance. Complementing this work, Dr. Chakraborty applies causal and explainable AI to cancer bioinformatics and multi-omics data, integrating genomics, transcriptomics, and clinical information to uncover mechanistic drivers, biomarkers, and therapeutic vulnerabilities. Across domains, his research emphasizes interpretability, causal reasoning, and physical or biological consistency, ensuring that AI outputs are transparent, trustworthy, and scientifically grounded. Dr. Chakraborty is actively engaged in training students and early-career researchers in ethical and reproducible AI, and in advancing convergent research that bridges environmental, engineering, and biomedical sciences.

Francesca Dominici

Director of Data Science Initiative and Professor, Harvard University

Dr. Francesca Dominici is the Director of the Harvard Data Science Initiative at Harvard University and the Clarence James Gamble Professor of Biostatistics, Population, and Data Science at the Harvard T.H. Chan School of Public Health. In 2024, she made the TIME100Health list for 2024: TIME100 Most Influential People in Global Health. She is an elected member of the National Academy of Medicine and of the International Society of Mathematical Statistics. She leads an interdisciplinary group of scientists to address important questions in environmental health science, climate change, and health policy. She has published over 300 peer-reviewed articles and provided her knowledge on the topics on joint panels with New Jersey Senator Cory Booker and the European Commission). Dr. Dominici has provided the scientific community and policymakers with comprehensive and compelling evidence on the adverse health effects of air pollution, noise pollution, and climate change. Her studies have directly and routinely impacted air quality policy. Dr. Dominici was recognized in Thomson Reuter's 2019 list of the most highly cited researchers–ranking in the top 1% of cited scientists in her field. The New York Times, the Los Angeles Times, BBC, the Guardian, CNN, and NPR have covered her work. In April 2020, she was awarded the Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society by the American Statistical Association. She advocates for the career advancement of women faculty, and her work on the Johns Hopkins University Committee on the Status of Women earned her the campus Diversity Recognition Award in 2009. She has led the Committee for the Advancement of Women Faculty at the Harvard T.H. Chan School of Public Health.

Tom Hamill

Director of Numerical Weather Prediction, The Weather Company

Tom Hamill directs numerical weather prediction for The Weather Company, including conventional and deep-learning based weather prediction model development. Prior to joining The Weather Company in 2022, Tom worked 21 years in NOAA research, leading development of global ensemble prediction systems, including developing ensemble-based data assimilation, treatment of model uncertainty in ensembles, and the production of ensemble-based reanalyses and reforecasts. Tom has bachelor's and doctoral degrees in atmospheric science from Cornell University and a masters in atmospheric science from Penn State. Tom is based in Boulder, Colorado.

Dan Hammer

Fellow, Renaissance Philanthropy; Co-founder, LGND

Dr. Dan Hammer is the co-founder of LGND, a venture-backed startup building AI infrastructure for Earth observation data, and co-founder of Ode, a design and technology agency for environmental applications. He is also a Fellow at Renaissance Philanthropy, supporting open-source AI for climate and nature. Dan previously served as Chief Data Scientist at the World Resources Institute, where he co-founded Global Forest Watch, and as a Senior Advisor at Google X. He was a Senior Policy Advisor in the Obama White House (Office of Science and Technology Policy) and a Presidential Innovation Fellow at NASA. A National Geographic Explorer, he is also the recipient of the inaugural Pritzker Environmental Genius Award and UC Berkeley's Mark Bingham Award for Excellence in Achievement. He has taught at Georgetown University, UC Berkeley, and the University of San Francisco. Dan holds a Ph.D. and M.S. from UC Berkeley and graduated with high honors from Swarthmore College as a Lang Scholar and Watson Fellow.

Alexis Hoffman
Senior Manager of Climate Data Science, Jupiter Intelligence
Alexis Hoffman is currently the Senior Manager of Climate Data Science at Jupiter Intelligence. She joined Jupiter in 2018 as a data scientist and now manages the data science team and the scientific development of physical risk products. She has also worked extensively to build internal statistical tools for extreme value analysis and is the lead developer of the wildfire risk product. Prior to joining Jupiter, Alexis received an M.S. and Ph.D. in Atmospheric Science from Penn State University where she used climate models to better understand mineral aerosol emissions and statistical crop models to estimate how different climate variables affect yields. She also provided technical expertise on satellite products and numerical weather prediction while working for The Aerospace Corporation. Alexis is an active member of the scientific community, serving on the AMS Committee on Open Environmental Information Services, a CMIP7 working group, and local environmental organizations.

Angel Hsu
Associate Professor of Public Policy and the Environment, University of North Carolina – Chapel Hill
Dr. Angel Hsu is an Associate Professor of Public Policy and the Environment at UNC-Chapel Hill and the founder and director of the Data-Driven EnviroLab. Her research explores the intersection of science and policy and the use of data-driven approaches, including AI, to advance understanding and action on environmental sustainability, particularly in the areas of climate change, energy, urbanization, and air quality. She is a lead author for the forthcoming IPCC Special Report on Cities and Climate, a contributing author to the IPCC 6th Assessment Report, and was the lead author of the 2018 UNEP Emissions Gap Report chapter on non-state and subnational actors. She also leads the CLAIM Center (Center for Climate Leadership and AI-driven Integrity in Mitigation), a new initiative focused on examining how generative AI tools like large language models are shaping and complicating the credibility, communication, and governance of climate action. She holds a Ph.D. in Environmental Policy from Yale University.

Hugo Lee
Data Scientist, NASA's Jet Propulsion Laboratory
Dr. Hugo Lee is an expert in climate model evaluation, geospatial analytics, and applied machine learning for atmospheric research, currently working at NASA's Jet Propulsion Laboratory (JPL). His work sits at the intersection of data science and earth systems, focusing on leveraging advanced computational techniques to improve the accuracy and utility of climate predictions. At JPL, Dr. Lee serves as the Principal Investigator for NASA's Regional Climate Model Evaluation System (RCMES) project, alongside leading several other NASA-funded initiatives. His leadership in these areas is pivotal for developing robust frameworks that validate climate models against real-world observational data. Beyond his direct research, Dr. Lee is an influential figure in the broader scientific community. He actively shapes the future of the field as a member of the Coordinated Regional Climate Downscaling Experiment (CORDEX) Task Force on Machine Learning. Additionally, he contributes to national strategy through the Interagency Council for Advancing Meteorological Services (ICAMS), where he serves on the AI/ML implementation team, helping to integrate artificial intelligence into the next generation of meteorological services.

David Lobell
Professor, Stanford University
David Lobell is the Benjamin M. Page Professor at Stanford University in the Department of Earth System Science and the Gloria and Richard Kushel Director of the Center on Food Security and the Environment. He is also the William Wrigley Senior Fellow at the Stanford Woods Institute for the Environment, and a senior fellow at the Freeman Spogli Institute for International Studies (FSI) and the Stanford Institute for Economic Policy and Research (SIEPR). Lobell's research focuses on agriculture and food security, specifically on generating and using unique datasets to study rural areas throughout the world. His early research focused on climate change risks and adaptations in cropping systems, and he served on the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report as lead author for the food chapter and core writing team member for the Summary for Policymakers. More recent work has developed new techniques to measure progress on sustainable development goals and study the impacts of climate-smart practices in agriculture. His work has been recognized with various awards, including the Macelwane Medal from the American Geophysical Union (2010), a Macarthur Fellowship (2013), the National Academy of Sciences Prize in Food and Agriculture Sciences (2022) and election to the National Academy of Sciences (2023).

Karen McKinnon
Professor of Statistics and the Environment, University of California – Los Angeles
Karen McKinnon is a professor of Statistics and the Environment at the University of California, Los Angeles. Her research sits at the nexus of climate change and statistics, and is aimed at improving our understanding and prediction of climate extremes, variability, and change. She is a 2024 NSF CAREER awardee, a 2023 Kavli Fellow, and a 2021 Packard Fellow in Science and Engineering, and she has served as an advisor for both city governments and private companies regarding climate change. Prof. McKinnon received her B.A., M.A., and Ph.D. from Harvard University, as well as an M.Sc. from Victoria University of Wellington. She was an Advanced Study Program post-doc at the National Center for Atmospheric Research and an Applied Scientist at Descartes Labs before joining UCLA.

Michael Méndez
Associate Professor of Environmental Policy and Planning, University of California – Irvine
Dr. Michael Mendez is an associate professor of environmental policy and planning, and chancellor's fellow at the University of California, Irvine, an Andrew Carnegie Fellow, and Visiting Scientist at the National Center for Atmospheric Research (NCAR). He previously was the inaugural James and Mary Pinchot Faculty Fellow in Sustainability Studies and Associate Research Scientist at the Yale School of the Environment. Michael has more than a decade of senior-level experience in the public and private sectors, where he consulted and actively engaged in the policymaking process. This included working for the California State Legislature as a senior consultant, lobbyist, member of the California State Mining & Geology Board, and as vice-chair of the Sacramento City Planning Commission. In 2021, California Governor Gavin Newsom appointed Dr. Mendez to the Los Angeles Regional Water Quality Control Board. The board regulates water quality in a region of 11 million people. From 2023-2025, he was appointed by Deanne Crisell, the Administrator of the Federal Emergency Management Agency (FEMA), to serve on their National Advisory Council. In that capacity, council members advise the Administrator on all aspects of emergency management, including preparedness, protection, response, recovery, and mitigation for natural disasters, acts of terrorism, and other manmade disasters. His book "Climate Change from the Streets," winner of 3 prestigious academic award and published through Yale University Press (2020), is an urgent and timely story of the contentious politics of incorporating environmental justice into global climate change policy.

Monica Morrison
Project Specialist III, National Science Foundation National Center for Atmospheric Research
Monica Morrison is a Project Specialist III at NSF NCAR with a split appointment across the Climate and Global Dynamics Laboratory and the Computational and Information Systems Laboratory. She holds a PhD in Philosophy from Indiana University at Bloomington, specializing in epistemology and ethics of climate science, with an emphasis on reliable and responsible modeling practices. Her current work focuses on responsible AI/ML integration into Earth system science, developing frameworks for model evaluation, fitness-for-purpose data and model assessment, and ethical risk management in climate research. She is co-lead of the WCRP CMIP-RIfS Responsible Data Use Task Team, and the Regional Information for Society Ethics Robust Information Working Group.

Catherine Nakalembe
Assistant Professor, University of Maryland
Dr. Catherine Nakalembe is an Assistant Professor at the University of Maryland's Department of Geographical Sciences. Her research focuses on using remote sensing and machine learning to improve smallholder agriculture, food security, early warning, and disaster assessment. She is the Founder and Director of Xylem Lab and Founder of The Xylem Institute, an Africa-based hub for innovation and collaboration in Earth Observations and artificial intelligence. She also serves as the Africa Director of NASA Harvest and a former Thematic Lead for Agriculture and Food Security at NASA SERVIR Applied Sciences. Dr. Nakalembe a TED speaker 2025 TED Fellow and received numerous awards and honors for her work, including the prestigious AL-Sumait Prize for Africa Development, the 2022 Golden Jubilee Medal (the highest civilian award in Uganda), the 2020 Africa Food Prize (the preeminent award recognizing an outstanding individual or institution that is leading the effort to change the reality of farming in Africa), a 2019 GEO Individual Excellence Award, and was named one of Africa's Top 100 Most Influential Leaders in 2023. She is also a 2025 Bellagio Center Resident and 2024 Carnegie African Diaspora Fellow.

Adam Nayak
Ph.D. Candidate, Columbia University & Graduate Research Fellow, National Science Foundation
Adam Nayak is a Ph.D. Candidate in the Department of Earth and Environmental Engineering at Columbia University and a National Science Foundation (NSF) Graduate Research Fellow. An affiliate of the Columbia Water Center and the Learning the Earth with Artificial Intelligence and Physics (LEAP) NSF Science and Technology Center, his research focuses on dynamic hydroclimatic risk and resilience across interconnected urban infrastructure, financial, and energy systems. At the intersection of stochastic hydrology, machine learning, and climate risk assessment, Adam’s recent work examines how spatiotemporally clustered climate extremes can destabilize insurance systems. He has previously held roles spanning data science, engineering, and policy at the U.S. Environmental Protection Agency, Jacobs, NASA, and the White House Climate Policy Office. Adam received his B.S. and M.S. from Stanford University in Civil and Environmental Engineering and Management Science and Engineering, respectively.

Andre Perkins
Senior Research Engineer, Allen Institute for AI
Andre Perkins builds machine learning systems for climate simulation as a Senior Research Engineer at Ai2 in Seattle. His work on Ai2's climate modeling team bridges traditional climate modeling and machine learning to improve simulation accuracy and efficiency. His most recent work is building a framework for emulating global high-resolution "storm-resolving" simulations, enabling fully probabilistic estimates of local climate impacts and extremes at a fraction of the computational cost. Andre holds a Ph.D. in Atmospheric Sciences from the University of Washington, where he was an NSF Graduate Research Fellow, and a B.S. in Computer Sciences and Atmospheric and Oceanic Sciences from the University of Wisconsin–Madison.

James Randerson

Professor of Earth System Science, University of California – Irvine

James Randerson studies the global carbon cycle and ecosystem responses to climate change. Using satellite imagery, his lab explores how regional and global wildfire patterns are changing. He uses field observations to constrain the magnitude and composition of fire emissions and atmospheric models to understand fire impacts on atmospheric chemistry, climate, and human health. Randerson received a B.S. in chemistry and a Ph.D. in biological sciences from Stanford University. He conducted postdoctoral work at UC Berkeley and the University of Alaska before joining the faculty at Caltech. In 2003, Randerson moved to UC Irvine, where he now holds the Ralph and Carol Cicerone Professorship in Earth System Science. He received the James Macelwane Medal and the Piers Sellers Global Environmental Change Mid-Career Award from the American Geophysical Union (AGU). Randerson was co-chair of the biogeochemistry working group of the Community Earth System Model (2003-2017), a member of the Biological and Environmental Research Federal Advisory Committee for the U.S. Dept of Energy (2011-2021), and currently serves on technical and science advisory boards for the Symbiosis Coalition and The Nature Conservancy. He is a Fellow of AGU and a member of the U.S. National Academy of Sciences.

Yuhan "Douglas" Rao

Senior Research Scholar, North Carolina State University

Dr. Yuhan "Douglas" Rao is a Senior Research Scholar with North Carolina State University specializing in artificial intelligence and long-term satellite data records. His research focuses on improving long-term satellite environmental data records using innovative statistical models, including machine learning. His broad research interests focus on advanced statistical models, data stewardship, satellite data development, land–atmosphere interaction, and applied research for climate and environment monitoring. Dr. Rao supports the development of NOAA Center for Artificial Intelligence (NCAI) through NOAA Cooperative Institute for Satellite Earth System Studies. He co-leads the development of data standards and guidelines on AI-ready data for open environmental data and AI-focused workforce development efforts for NOAA. He has led collaboration with World Data System, Earth Science Information Partners, and NSF-funded FAIR Open Science Research Coordination Network to pilot the AI-readiness checklist for assessing data readiness for AI applications. Currently, he serves as the co-chair of the Working Group on Observations for Researching Climate, part of the WCRP Earth System Modeling and Observation core project and is the Board President of Earth Science Information Partners.

David Rolnick

Assistant Professor and Canada CIFAR AI Chair, McGill University and Mila

David Rolnick is an Assistant Professor and Canada CIFAR AI Chair in the School of Computer Science at McGill University and at Mila – Quebec AI Institute. He is a Co-founder and Chair of Climate Change AI and serves as Scientific Co-director of Sustainability in the Digital Age and co-lead of the Global Center on AI and Biodiversity Change (ABC). Dr. Rolnick is a Sloan Research Fellow and an AI2050 Early Career Fellow and was named to the MIT Technology Review's 2021 list of "35 Innovators Under 35" for his work in building the field of AI and climate change. He received his Ph.D. in Applied Mathematics from MIT and is a former Fulbright Scholar, NSF Graduate Research Fellow, and NSF Mathematical Sciences Postdoctoral Research Fellow.

Alan Talhelm

Assistant Deputy Director for Climate & Energy, California Department of Forestry & Fire Protection

Alan Talhelm has been the Assistant Deputy Director for Climate & Energy in the California Department of Forestry & Fire Protection (CAL FIRE) since July 2023. He oversees the Forest Health, Tribal Wildfire Resilience, and Business & Workforce Development grant programs, staff assigned to the Governor's Wildfire & Forest Resilience Task Force, and CAL FIRE's engagement in climate policy. He also chairs the Task Force's Monitoring, Reporting, and Assessment Work Group, including the development of the Task Force's Wildfire & Landscape Resilience Interagency Treatment System database and Dashboard. Through these roles, he has helped CAL FIRE fund and adopt new wildfire-related technologies. Alan holds a Ph.D. in forest ecology from the University of Nevada, Reno and a Bachelor of Science in Natural Resources & the Environment from the University of Michigan. As a scientist studying forest carbon cycling, wildland fire, air quality, and other issues, he has published several dozen peer-reviewed articles, which have been cited by other scientists more than 3000 times. Prior to joining CAL FIRE, Alan worked at the California Air Resources Board on forestry, wildfire, and climate issues. He previously worked at the US Environmental Protection Agency, University of Idaho, and US Forest Service.

Kieran White

Multimedia Journalist, KWMEDIA

Kieran White is a multimedia journalist with nearly 20 years of experience, holding a BA (Hons) in Media and Communications from Kingston University, London. He is a member of the National Union of Journalists (NUJ) and the International Federation of Journalists (IFJ). White began his career in the creative industries, traveling globally to photograph leading music figures — a body of work that has resulted in hundreds of published features and credits across international outlets. In 2020, he pivoted to investigative journalism on the socio-political impacts of COVID-19, using open-source intelligence (OSINT) to examine how extremist groups across the political spectrum leveraged emerging technologies and dark psychology to adapt recruitment, organize, and amplify influence in restrictive environments. His primary focus today is ***Cool Your Bytes™***, a project that synthesizes his deep roots in creative media with a critical examination of technology's societal risks. Fostering balanced, open discussions on artificial intelligence, it rejects alarmist nihilism and uncritical hype while providing practical guidance for individuals and families. The initiative explores AI's profound implications for personal rights, civil liberties and data privacy.

Christopher Wirz

Assistant Professor of Risk and Science Communication & Extension Specialist, University of Illinois Urbana-Champaign

Christopher Wirz (he/him) is an Assistant Professor of Risk and Science Communication and Extension Specialist at the University of Illinois Urbana-Champaign. He studies how environmental technologies and predictions can be developed and implemented in ways that serve people. He focuses on how decision making, information development, and communication systems shape whether tools are usable, trusted, and used effectively. His recent work examines weather hazards and the human dimensions of use-inspired AI for environmental decision making and communication. At Illinois, he is expanding this research into food and environmental systems to help translate emerging science and technology into decisions that keep communities safe, fed, and supported.