

SPEAKERS



Ruha Benjamin

Associate Professor of African American Studies at Princeton University

Dr. Ruha Benjamin is an Associate Professor at Princeton University, founder of the JUST DATA Lab, and author of *People's Science: Bodies and Rights on the Stem Cell Frontier* (2013) and *Race After Technology: Abolitionist Tools for the New JimCode* (2019) among other publications. Her work investigates the social dimensions of science, medicine, and technology with a focus on the relationship between innovation and inequity, health and justice, knowledge and power. Professor Benjamin is the recipient of numerous awards and fellowships including from the American Council of Learned Societies, National Science Foundation, Institute for Advanced Study, and the President's Award for Distinguished Teaching at Princeton. For more info visit www.ruhabenjamin.com



Aubrey de Grey

Chief Science Officer of SENS Research Foundation

Dr. Aubrey de Grey is a biomedical gerontologist and is the CSO of SENS Research Foundation, a biomedical research charity that performs laboratory research dedicated to combating the aging process. He is VP of New Technology Discovery at AgeX Therapeutics, a biotech startup developing new therapies in biomedical gerontology. His research interests encompass the characterisation of self-inflicted cellular and molecular damage that constitute mammalian aging and the design of interventions to repair and/or obviate that damage. He is Editor-in-Chief of *Rejuvenation Research*, a journal focusing on intervention in aging, and received his BA in CS and Ph.D. in biology from the University of Cambridge.



Hod Lipson

Director of Creative Machines Lab at Columbia University

Hod Lipson is a professor of Engineering and Data Science at Columbia University in New York, and a co-author of the award winning book *Fabricated: The New World of 3D printing* and "Driverless: Intelligent cars and the road ahead". His work on self-aware and self-replicating robots challenges conventional views of robotics, and has enjoyed widespread media coverage. Lipson has co-authored over 300 publications that received over 20,000 citations to date. He has co-founded four companies. Hod directs the Creative Machines Lab, which pioneers new ways to make machines that create, and machines that are creative.



Anders Sandberg

Senior Research Fellow at the Future of Humanity Institute in Oxford

Anders Sandberg is a senior research fellow at the Future of Humanity Institute in University of Oxford. His research centers on management of low-probability high-impact risks, estimating the capabilities of future technologies, the ethics of human enhancement, and very long-range futures. He is also senior research fellow at the Oxford Martin School, research associate to the the Oxford Uehiro Centre for Practical Ethics, the Oxford Centre for Neuroethics, the Center for the Study of Bioethics (Belgrade) and the Institute for Futures Studies (Stockholm). Anders has a background in computer science, neuroscience and medical engineering. He obtained his Ph.D. for work on neural network modelling of human memory.



Kai Landre

Artist and Cyborg

Kai Landre, born in Barcelona in 2000, joined the Cyborg Foundation movement in 2017 when he met its founder, Neil Harbisson. Kai showed interest in space since his childhood and could only connect to its sounds through music. His dream was to take part in outer space, the inability to do so made him start his transition in 2018 to cyborgism, when he created the Cosmic Sense, which allows him to create music with sounds from space.



Johannon Ben Zion

Transhumanist Party Candidate for President

J Ben Zion is United States Transhumanist Party's endorsed Presidential Candidate for 2020. He advocates for a public health service which would treat aging as a disease and for a broad slate of e-governance and decentralization initiatives including a blockchain voting option across the United States. He's presently undertaking to break the Guinness world record for the longest period of virtual reality immersion in January of 2020.



Michele Reilly

Founder of Turing Inc.

Michele Reilly is the founder of Turing Inc., a pioneer in spin-based quantum systems. Turing develops quantum compiler back-ends, quantum error correction IP, and other control components as the basis of a quantum Operating System. Turing's advocacy and focus on post-supremacy computing led to a chipset, which is the basis for a global trunkline system for provably secure quantum communications. Prior to Turing, Dr. Reilly managed \$130M in assets as Chief Investment Officer for Victor Niederhoffer's Manchester Trading in NYC.



Phil Torres

Founder of X-Risks Institute

Phil Torres is an author and scholar specializing in existential risk. His work has spanned many topics such as cognitive enhancement, omniscient agents, space colonization, superintelligence, anti-natalism, and emerging technologies. He is an Affiliate Scholar at the Institute for Ethics and Emerging Technologies and the director of the Project for Future Human Flourishing, as well as the founder of the X-Risks Institute.



Natlie Kofler

Founder of Editing Nature

Natalie Kofler is a trained molecular biologist and a leading voice in CRISPR and synthetic biology ethics. She advocates for equity in science and the inclusion of diverse perspectives in technology design and governance. She is an affiliated scholar of the Yale Interdisciplinary Center for Bioethics and the Solomon Center for Health Law and Policy at the Yale Law School. She teaches Environmental Ethics and Justice at Harvard Medical School. Natalie received her PhD in cellular, molecular, and medical biosciences and MS in human nutrition and metabolic studies from Columbia University and her BS in human anatomy and cell biology from McGill University. She is currently the Levenick Resident Scholar at the Institute of Sustainability, Energy, and the Environment at the University of Illinois Urbana-Champaign and founder of Editing Nature, a global initiative to steer responsible development and deployment of environmental genetic technologies.



Brett Frischmann

Professor in Law, Business and Economics at Villanova School of Law

Brett Frischmann is the Charles Widger Endowed University Professor in Law, Business and Economics at Villanova University, teaching courses in intellectual property, Internet law, and technology policy. His research covers three overlapping areas: infrastructure, knowledge commons, and techno-social engineering of humans (the relationships between the techno-social world and humanity). His latest book, co-authored with philosopher Evan Selinger, *Re-Engineering Humanity* (Cambridge University Press), examines techno-social engineering of humans, various 'creep' phenomena and modern techno-driven Taylorism. In addition, he has written a number of online articles on the intersection of technology and humanity for *Scientific American*.

SPEAKERS



David Yaden

Research Fellow and Doctoral Candidate at University of Pennsylvania

David Bryce Yaden works in both The Positive Psychology Center and The Center for Cognitive Neuroscience. His research focuses on the psychology, philosophy, and neuroscience of spiritual, self-transcendent, and other positively transformative experiences. Specifically, he is interested in understanding how these experiences can result in long-term changes to well-being and how they alter fundamental faculties of consciousness such as the sense of time, space, and self. He is the editor of *Being Called* and is currently writing a book called *The Varieties of Spiritual Experiences: A Twenty-First Century Update*. His work has been covered by *The New York Times*, *The Wall Street Journal*, *The Washington Post*, *New York Magazine*, and *NPR*.



Sures Kumar

Speculative Designer at Google AI

Sures Kumar is an interaction designer and a recognized digital artist, specializing in speculation design. He works in Google's Research and Machine Intelligence team (Google AI) to advance new, human-centered artificial intelligence experiences. Kumar has led interactions for multiple high profile projects like TensorFlow and next generation Google Lens and has also contributed to Google Pixel Camera, Android, Google Play and G Suites. Prior to Google, Kumar worked at Microsoft where he designed Microsoft Office mobile apps and interactive museum installations. Kumar's works have been exhibited internationally across various galleries, referred in academic books and featured in magazines like *Wired*. www.sureskumar.com



Susan Schneider

Director of AI, Mind and Society ("AIMS") Group, The University of Connecticut.

Susan Schneider writes about the nature of the self and mind, especially from the vantage point of issues in philosophy, AI, cognitive science and astrology. In her new book, *Artificial You: AI and the Future of the Mind* she discusses the philosophical implications of AI, and, in particular, the enterprise of "mind design." Her work in philosophy of AI has now taken her to the Hill (Washington, DC), where she will meet with members of Congress on AI policy. Schneider appears frequently on television shows, and writes opinion pieces.



Courtney D. Cogburn

Associate Professor of Social Work at Columbia University

Courtney D. Cogburn employs a transdisciplinary approach to examining the role of racism in the production of racial inequalities in health. She is on the faculty of the Columbia Population Research Center and a faculty affiliate of the Center on African American Politics and Society and the Data Science Institute. She has focused on examining the effects of cultural racism in the media on acute physiological, psychological, and behavioral stress responses as well as associations between chronic psychosocial stress exposure and Black/White disparities in cardiovascular health and disease. She is also developing a project using data science to explore links between media-based racism and population health.



Noam Cohen

Journalist and Author

Noam Cohen is a journalist and author of *The Know-It-Alls: The Rise of Silicon Valley as a Political Powerhouse and Social Wrecking Ball*, which uses the history of computer science and Stanford University to understand the libertarian ideas promoted by tech leaders. While working for *The New York Times*, Cohen wrote some of the earliest articles about Wikipedia, bitcoin, Wikileaks, and Twitter. He lives with his family in Brooklyn.



Robin Hanson

Associate Professor of Economics at George Mason University

Robin Hanson is an associate professor of economics at George Mason University. He is an expert in idea futures and markets, and he was involved in the creation of the Foresight Institute's Foresight Exchange and DARPA's FutureMAP project, and is currently a chief scientist at Consensus Point.



Elizabeth Parrish

CEO of BioViva

Elizabeth Parrish, the Founder and CEO of BioViva, is a leading voice for genetic cures. As a strong proponent of progress and education for the advancement of regenerative medicine modalities, she serves as a motivational speaker to the public at large for the life sciences. Dedicated to the cause of improving and safeguarding more and more lives, Elizabeth asserts, "We are focused on saving as many lives as possible by making tomorrow's therapies available. This is about Life and Death. Risk aversion and the delaying the approval of therapies that have been successful in research simply kills."



Melinda Soares-Furtado

NSF Graduate Research Fellow at Princeton Astrophysical Sciences

Melinda Soares-Furtado is a National Science Foundation Graduate Research Fellow in the Department of Astrophysical Sciences at Princeton University. Soares-Furtado built an image subtraction pipeline that reveals exoplanets, eclipsing binaries, pulsating stars, and rotational variables in stellar clusters. She is also interested in how close-orbiting planetary companions impact the evolution of a host star. She builds computational models to investigate these effects. Soares-Furtado is also committed to exploring the philosophical dimensions of science and technology. While she believes that efforts to advance space colonization are worthwhile, she is concerned that unbridled optimism has led to a faulty conclusion: that if all fails on Earth, we have an escape hatch.



Francesca Ferrando

Philosopher of the Posthuman

Francesca Ferrando teaches Philosophy at NYU-Liberal Studies, New York University. A leading voice in the field of Posthuman Studies and founder of the NY Posthuman Research Group, she has been the recipient of numerous honors and recognitions, including the Sainati prize with the Acknowledgment of the President of Italy. She has published extensively on these topics; her latest book is *Philosophical Posthumanism* (Bloomsbury 2019). In the history of TED talks, she was the first speaker to give a talk on the topic of the posthuman. *US* magazine "Origins" named her among the 100 people making change in the world. More info: www.theposthuman.org



Umer Hassan

Assistant Professor of Electrical and Computer Engineering at Rutgers

Dr. Umer Hassan is an assistant professor at Rutgers University. Previously, he worked as a Research Scientist in the Department of Bioengineering at University of Illinois Urbana-Champaign (UIUC) with a Research Affiliate appointment at Carle Foundation Hospital, Urbana. Dr. Hassan completed his B.Sc in Electrical Engineering from UET, Lahore and M.S. and Ph.D. studies in Electrical and Computer Engineering from UIUC in 2015. His research has been focused on developing point-of-care (PoC) translational biosensors for infectious disease diagnostic applications. In 2014, Dr. Hassan cofounded a startup, Prenosis, Inc. that is working on commercializing his developed biosensors.

SPEAKERS



Whitney Huang

Embedded Software Engineer at Zipline

Whitney Huang is an Embedded Software Engineer at Zipline, a high-speed drone medical delivery company. She was formerly the president of the Princeton Rocketry Club and Princeton Robotics Club, and has built everything from underwater ROVs to sensors for soft robotics to autonomously controlled quadcopters. She is passionate about using technology to tackle important problems our world faces today. She got her degree in Mechanical Engineering from Princeton University.



Nathan Danielson

Software Engineer at CTRL-Labs

Nathan Danielson graduated from Princeton University with an AB in mathematics and a certificate from PACM. He spent a year working as a computational neuroscience research assistant, and from there did his MD/PhD at Columbia, where he received a degree in neurobiology and behavior; his doctoral research was in hippocampal learning and memory. After graduation in 2017 he joined CTRL-Labs, where he manages a team of neuroscientists and engineers working to build a wearable neural interface to support the next generation of computing platforms.



Wei Liu

Head of ML at Nuro

Wei Liu is the Head of Machine Learning at Nuro, leading the effort of applying machine learning to the whole autonomy stacks, including mapping, perception, prediction, and planning, etc. Before that, he was a Ph.D. student with Prof. Alex Berg at UNC Chapel Hill, working on large scale object classification and object detection, such as GoogLeNet and SSD, he was also the organizer of ImageNet Challenge in 2015 and 2016, and received Google Ph.D. fellowship.



Daniel Elton

Staff Scientist at the National Institute of Health

Daniel Elton is a staff scientist at the National Institutes of Health, where he works on applying deep learning and AI to medical imaging. Previously he worked as a postdoc at the University of Maryland, where he researched applications of deep learning to molecular design. Originally from upstate New York, he earned a Ph.D. in physics from Stony Brook University in 2016 and has a bachelors degree in physics from Rensselaer Polytechnic Institute. His website is www.moreisdifferent.com.



Rachel McClure

Grad Research Fluno Fellow at Uni of Wisconsin-Madison in Astronomy

Rachel McClure is a Graduate Research Fluno Fellow at University of Wisconsin-Madison in the Astronomy Department. Her prior work isolated contributions to the motion of the plasma in the photosphere of the sun. Currently, she works on measuring the orbital and rotational velocities of variable stars to identify blue stragglers and other binary system remnants in clusters. She is passionate about science education and improving public attitude towards the natural sciences. With a B.A. in Philosophy and Astrophysics, McClure is especially interested in the interplay of ethics and scientific exploration at this pivotal time of increasing astrophysical exploration where ethical theories will serve as a tool for developing a more equitable, globalized society.



Peter Diamandis

Entrepreneur, Author, Founder

Recently named by Fortune as one of the "World's 50 Greatest Leaders," Peter H. Diamandis is the founder and executive chairman of the XPRIZE Foundation, which leads the world in designing and operating large-scale incentive competitions. He is also the executive founder of Singularity University, a graduate-level Silicon Valley institution that counsels the world's leaders on exponentially growing technologies.

As an entrepreneur, Diamandis has started over 20 companies in the areas of longevity, space, venture capital and education. He is co-founder of BOLD Capital Partners, a venture fund with \$250M investing in exponential technologies, and co-founder and Vice Chairman of Celularity, Inc., a cellular therapeutics company.