

Artificial Intelligence and the Future of Work

Committee

Erik Brynjolfsson

Co-Chair

Erik Brynjolfsson is the Jerry Yang and Akiko Yamazaki Professor and Senior Fellow at the Stanford Institute for Human-Centered AI (HAI), and Director of the Stanford Digital Economy Lab. He is the Ralph Landau Senior Fellow at the Stanford Institute for Economic Policy Research (SIEPR) and holds appointments at the Stanford Graduate School of Business, Stanford Department of Economics and a Research Associate at the National Bureau of Economic Research (NBER). One of the most-cited authors on the economics of information, Brynjolfsson was among the first researchers to measure productivity contributions of IT and the complementary role of organizational capital and other intangibles. He has done pioneering research on digital commerce, the Long Tail, bundling and pricing models, intangible assets and the effects of IT on business strategy, productivity and performance. Brynjolfsson speaks globally and is the author of nine books including, with co-author Andrew McAfee, best-seller *The Second Machine Age: Work, Progress and Prosperity in a Time of Brilliant Technologies*, and *Machine, Platform, Crowd: Harnessing Our Digital Future* as well as over 100 academic articles and five patents. He holds Bachelors and Masters degrees from Harvard University in applied mathematics and decision sciences and a PhD from MIT in managerial economics.

Tom M. Mitchell

Co-Chair

Tom M. Mitchell, NAE, is the E. Fredkin University Professor at Carnegie Mellon University, where he founded the world's first Machine Learning Department. Mitchell's research lies in machine learning, artificial intelligence, and cognitive neuroscience. His current research includes developing machine learning approaches to natural language understanding by computers, as well as brain imaging studies of natural language understanding by humans. Mitchell is a member of the American Association of Arts and Sciences and is Past President of the Association for the Advancement of Artificial Intelligence. In 2015 he was awarded an Honorary Doctor of Laws Degree from Dalhousie University for his contributions to machine learning and cognitive neuroscience, and in 2017 he received the 10-Year Outstanding Research Contributions Award from the Brain Informatics Conference for his research studying language processing in the human brain. Dr. Mitchell received his Ph.D. in electrical engineering and computer science from Stanford University.

David H. Autor

Member

David Autor is Ford Professor in the MIT Department of Economics, Vice President of the American Economic Association, codirector of the NBER Labor Studies Program and the JPAL Work of the Future experimental initiative. His scholarship explores the labor-market impacts of technological change and globalization on job polarization, skill demands, earnings levels and inequality, and electoral outcomes. Autor has received numerous awards for both his scholarship—the National Science Foundation CAREER Award, an Alfred P. Sloan Foundation Fellowship, the Sherwin Rosen Prize for outstanding contributions to the field of Labor Economics, the Andrew Carnegie Fellowship in 2019, the Society for Progress Medal in 2021—and for his teaching, including the MIT MacVicar Faculty Fellowship. In 2020, Autor received the Heinz 25th Special Recognition Award from the Heinz Family Foundation for his work “transforming our understanding of how globalization and technological change are impacting jobs and earning prospects for American workers.” In a 2019 article, the Economist magazine labeled Autor as “The academic voice of the American worker.” Dr. Autor received his Ph.D. in Public Policy from the John F. Kennedy School of Government at Harvard University.

John C. Haltiwanger

Member

John C. Haltiwanger is a Distinguished University Professor in the Department of Economics at the University of Maryland. He is also the first recipient of the Dudley and Louisa Dillard Professorship in 2013. After serving on the faculty of UCLA and Johns Hopkins, he joined the faculty at Maryland in 1987. In the late 1990s, he served as Chief Economist of the U.S. Census Bureau. He is a Research Associate of the National Bureau of Economic Research, and a Fellow of the Society of Labor Economics and the Econometric Society. He has played a major role in developing and studying U.S. longitudinal firm-level data. Using these data, he has developed new statistical measures and analyzed the determinants of firm-level job creation, job destruction and economic performance. The statistical and measurement methods he has helped develop to measure and study firm dynamics have been increasingly used by many statistical agencies around the world. His research has been recognized in his being awarded the Julius Shiskin Award for economic statistics in 2013, the Roger Herriott Award for innovation in federal statistics in 2014, the Global Entrepreneurship Research Award in 2020, and Society of Labor Economics Award for Contributions to Data and Measurement in 2021. He has published more than 100 academic articles and numerous books including Job Creation and Destruction (with Steven Davis and Scott Schuh, MIT Press). Dr. Haltiwanger received his Ph.D. in economics from the Johns Hopkins University in 1981.

Eric Horvitz

Member

Eric Horvitz, NAE, is Microsoft's Chief Scientific Officer. He has pursued research on principles and applications of machine learning and inference, including projects on diagnosis, prediction, and decision making in health and bioscience, transportation, aerospace, and computing systems. His current research foci include methods for leveraging the complementarity of human and machine reasoning and for enhancing the robustness of AI systems in the open world. He is a member of the National Academy of Engineering. He received the AAAI/ACM Allen Newell Award, the Feigenbaum Prize, and ACM ICMI Sustained Accomplishment Award for contributions to AI. He was elected to the CHI Academy for research on human-AI interaction. He serves on the President's Council of Advisors on Science and Technology (PCAST and the scientific advisory board of the Allen Institute for AI. Dr. Horvitz previously served on the Computer Science and Telecommunications Board (CSTB) of the National Academies of Science, Engineering, and Medicine. He has served as president of the Association for the Advancement of AI (AAAI), on the Board of Regents of the National Library of Medicine, the NSF CISE Advisory Board, DARPA ISAT, and the National Security Commission on AI. He was a member of the National Academy's Committee on Information Technology, Automation, and the U.S. Workforce, and was a co-author of the 2017 National Academies report authored by the committee. Dr. Horvitz received Ph.D. and MD degrees in Medical Information Science from Stanford University.

Lawrence F. Katz

Member

Lawrence F. Katz, NAS, is the Elisabeth Allison Professor of Economics at Harvard University, a Research Associate of the National Bureau of Economic Research, and co-Scientific Director of J-PAL North America. His research focuses on issues in labor economics and the economics of social problems. He is the author (with Claudia Goldin) of *The Race between Education and Technology* (Harvard University Press, 2008), a history of U.S. economic inequality and the roles of technological change and the pace of educational advance in affecting the wage structure. Professor Katz has been editor of the *Quarterly Journal of Economics* since 1991 and served as the Chief Economist of the U.S. Department of Labor for 1993 and 1994. He is past President of the Society of Labor Economists and has been elected a fellow of the National Academy of Sciences, American Academy of Arts and Sciences, the Econometric Society, and the Society of Labor Economists. Katz currently serves on the Board of MDRC. Dr. Katz graduated from the University of California at Berkeley in 1981 and earned his Ph.D. in Economics from the Massachusetts Institute of Technology in 1985.

Nela Richardson

Member

Nela Richardson is the SVP, Chief Economist at ADP. In this capacity, Nela is also the co-head of the ADP Research Institute and leads economic research for ADP. Previously she was Principal and Investment Strategist at Edward Jones, a financial services firm. In that role, Nela analyzed and interpreted economic trends and financial market conditions and recommended investment strategies. Nela is also the former chief economist at Redfin Corp where she led a team of data scientists, economists and writers to track trends in the housing market. Nela regularly provides insight on the economy, real estate trends and capital markets to policymakers, consumers and media. Nela earned a doctorate in economics from the University of Maryland College Park with concentrations in financial economics, international finance and economic development. She is also a graduate of the University of Pennsylvania and Indiana University, Bloomington. Nela is a member of the Bureau of Economic Analysis Advisory Committee, the Conference of Business Economists and sits on the Chamber of Commerce and National Association of Business Economists foundation boards. Dr. Richards received her Ph.D. in Economics from the University of Maryland, College Park.

Michael R. Strain

Member

Michael R. Strain is Director of Economic Policy Studies and Arthur F. Burns Scholar in Political Economy at the American Enterprise Institute. His research focuses on labor economics, public finance, and social policy. He is the author of *The American Dream Is Not Dead*, which studies longer-term economic outcomes for workers and households, and is the editor or coeditor of four volumes on economics and public policy. His research articles have been published in academic and policy journals. He is a research fellow with the Institute for the Study of Labor (IZA) in Bonn, a research affiliate with the Institute for Research on Poverty at the University of Wisconsin, Madison, and a member of the Aspen Economic Strategy Group. He is an elected member of the National Academy of Social Insurance. He also writes frequently for popular audiences, and his essays and op-eds have been published by *The New York Times*, *The Wall Street Journal*, *the Financial Times*, and *The Washington Post*, among others. A frequent guest on radio and television, Dr. Strain is regularly interviewed by broadcast news networks. He has testified before Congress and speaks often to a variety of audiences. He holds a Ph.D. in economics from Cornell University.

Laura D. Tyson

Member

Laura D. Tyson is a Distinguished Professor of the Graduate School at the Haas School of Business, University of California, Berkeley. She is the co-chair California Governor Gavin Newsom's Council of Economic Advisors. In 2019, she was the Richard C. Holbrooke Fellow for the American Academy in Berlin. During her fellowship, she researched the effects of intelligent tools on employment, inequality, and livelihoods in Germany. Her research in this area is part of a broader interdisciplinary project that she co-founded at UC Berkeley on the effects of automation on labor markets in the advanced industrial countries. She has received support for her work in this area from the Kauffman Foundation and the Germany Federal Ministry of Labor and Social Affairs. Tyson has given numerous presentations and is the author of several academic papers, reports, and book chapters about the effects of automation in labor markets in the advanced industrial economies. Tyson has served as a senior external advisor at the McKinsey Global Institute for many of their reports including The Future of Work after COVID19. From 2020-2021, she served on French President Emmanuel Macron's Commission d'experts sur les grands défis économiques. Previously she was a board member of the National Academies of Science, Engineering, and Medicine's Technology and Economic Policy and a member of its Innovation Policy Forum. Tyson has a summa cum laude undergraduate degree from Smith College and a PhD in economics from the Massachusetts Institute of Technology.

She serves on the Board of Directors of Lexmark International and Stem, Inc.

Manuela Veloso

Member

Manuela Veloso, NAE, is Head of J.P. Morgan Chase AI Research and Herbert A. Simon University Professor Emerita at Carnegie Mellon University (CMU), where she was previously faculty in the Computer Science Department and later Head of the Machine Learning Department. Veloso researches in Artificial Intelligence, with focus in robotics and recently in AI in Finance. At CMU, she founded and directs the CORAL research laboratory, for the study of autonomous agents that Collaborate, Observe, Reason, Act, and Learn. Veloso and her students research a variety of autonomous robots, including mobile service robots and soccer robots. She is past president of the Association for the Advancement of Artificial Intelligence (AAAI), and the co-founder and a Past President of the RoboCup Federation. Veloso is a Fellow of AAAI, AAAS, ACM, and IEEE. She was elected in 2022 to the National Academy of Engineering "for her contributions to artificial intelligence and its applications to robotics and the financial services industry." Dr. Veloso received her Ph.D. in Computer Science from Carnegie Mellon.