MIT Industrial Liaison Program Faculty Knowledgebase Report

2023 MIT Digital Technology and Strategy Conference

October 25, 2023 - October 26, 2023

Day 1 | Wednesday October 25, 2023

8:00 AM

Registration and Light Breakfast

Welcome and Introduction
John Roberts
Executive Director (Interim), MIT Corporate Relations



John Roberts
Executive Director (Interim)
MIT Corporate Relations

John Roberts has been Executive Director of MIT Corporate Relations (Interim) since February 2022. He obtained his Ph.D. in organic chemistry at MIT and returned to the university after a 20-year career in the pharmaceutical industry, joining the MIT Industrial Liaison Program (ILP) in 2013. Prior to his return, John worked at small, medium, and large companies, holding positions that allowed him to exploit his passions in synthetic chemistry, project leadership, and alliance management while growing his responsibilities for managing others, ultimately as a department head. As a program director at MIT, John built a portfolio of ILP member companies, mostly in the pharmaceutical industry and headquartered in Japan, connecting them to engagement opportunities in the MIT community. Soon after returning to MIT, John began to lead a group of program directors with a combined portfolio of 60-80 global companies. In his current role, John oversees MIT Corporate Relations which houses ILP and MIT Startup Exchange.

Graham Rong Program Director, MIT Industrial Liaison Program



Graham Rong
Program Director
MIT Industrial Liaison Program

Dr. Rong is a Program Director of Corporate Relations at MIT. He currently supervises a group of ILP program directors who promote and manage the interactions and relationships between the research at MIT and companies worldwide to help them stay abreast of the latest developments in technology and business practices.

Previously, Dr. Rong founded IKA, LLC. He has led corporate development and product innovation and provided strategic advice to companies in corporate strategy, IT leadership, digital transformation, AI, enterprise content management, and customer relationships. He held senior roles in Harte-Hanks and Vignette Corporation. He held an EU postdoctoral research fellowship at the University of Edinburgh in Scotland where he started global collaborative research.

Dr. Rong is on the board of multiple organizations, including the MIT Sloan Alumni Association of Boston from 2009 to 2012. He chaired MIT Sloan CIO Symposium from 2009-2011. He is a senior expert invited by international organizations.

Dr. Rong holds an M.B.A. in global and innovation leadership from the MIT Sloan School of Management and a Ph.D in numerical computing from the University of Guelph in Canada.

Keynote: Community Transformers Alex Pentland Toshiba Professor Professor of Media Arts and Sciences Head, Human Dynamics Research Group



Alex Pentland
Toshiba Professor
Professor of Media Arts and Sciences
Head
Human Dynamics Research Group

Alex "Sandy" Pentland directs MIT's Connection Science initiative and the MIT Media Lab Entrepreneurship Program and is a founding member of advisory boards for the World Economic Forum, AT&T, Telefonica, United Nations, and Nissan. He previously helped create and direct MIT's Media Laboratory, the Media Lab Asia laboratories at the Indian Institutes of Technology, and Strong Hospital's Center for Future Health.

Forbes magazine declared Pentland "one of the seven most powerful data scientists in the world," along with the founders of Google and the CTO of the United States. Pentland is among the most-cited computational scientists in the world, and a pioneer in big data analytics, computational social science, organizational engineering, and wearable computing. His research has been featured in *Nature*, *Science*, the World Economic Forum, and *Harvard Business Review*, as well as being the focus of TV features including "Nova" and "Scientific American Frontiers." His most recent books are *Social Physics*, and *Trust ::*

Interesting experiences include winning the DARPA 40th Anniversary of the Internet Grand Challenge, dining with British Royalty and the President of India, staging fashion shows in Paris, Tokyo, and New York, and developing a method for counting beavers from space.

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LLMs like GPT have great potential, but have limited ability to handle company proprietary data, customer proprietary data, or personal data in a way that leverages company/client/employee data, preserves proprietary and personal data boundaries, and is compliant with current and emerging regulation. I will present ways of achieving these ends, as well as minimizing consequences for the mistakes and biases that will inevitably happen.

Can We Have Pro-Human AI? Daron Acemoglu Institute Professor, MIT Economics



Daron Acemoglu Institute Professor MIT Economics

Daron Acemoglu an Institute Professor at MIT and an elected fellow of the National Academy of Sciences, American Philosophical Society, the British Academy of Sciences, the Turkish Academy of Sciences, the American Academy of Arts and Sciences, the Econometric Society, the European Economic Association, and the Society of Labor Economists. He is also a member of the Group of Thirty.

He is the author of six books, including New York Times bestseller *Why Nations Fail: Power, Prosperity, and Poverty* (joint with James A. Robinson), *Introduction to Modern Economic Growth, The Narrow Corridor: States, Societies, and the Fate of Liberty* (with James A. Robinson), and *Power and Progress: Our Thousand-Year Struggle Over Technology and Prosperity* (with Simon Johnson).

His academic work covers a wide range of areas, including political economy, economic development, economic growth, technological change, inequality, labor economics and economics of networks

Daron Acemoglu has received the inaugural T. W. Shultz Prize from the University of Chicago in 2004, and the inaugural Sherwin Rosen Award for outstanding contribution to labor economics in 2004, Distinguished Science Award from the Turkish Sciences Association in 2006, the John von Neumann Award, Rajk College, Budapest in 2007, the Carnegie Fellowship in 2017, the Jean-Jacques Laffont Prize in 2018, the Global Economy Prize in 2019, and the CME Mathematical and Statistical Research Institute prize in 2021.

He was awarded the John Bates Clark Medal in 2005, the Erwin Plein Nemmers Prize in 2012, and the 2016 BBVA Frontiers of Knowledge Award.

He holds Honorary Doctorates from the University of Utrecht, the Bosporus University, University of Athens, Bilkent University, the University of Bath, Ecole Normale Superieure, Saclay Paris, and the London Business School.

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This talk argues that advances in generative AI are compatible with a pro-human direction of future technology. This means, in particular, production technologies that increase the contribution of workers to productivity, and communication technologies that boost human agency and democratic participation. However, we are currently on a path leading in the opposite direction---anti-worker production technologies and anti-democratic communication technologies. This is both because of distorted incentives and priorities within the tech industry and also because of some of the architectural features of leading generative AI models. The talk concludes with some policy suggestions to help engineer a course correction towards pro-human AI.

10:35 AM MIT Professional Education Myriam Joseph

Manager, Business Development and Marketing, MIT Professional Education

10:40 AM Networking Break

Generative AI - A Revolution in Productivity
Abel Sanchez
Executive Director, MIT Geospatial Data Center (GDC)



Abel Sanchez
Executive Director
MIT Geospatial Data Center (GDC)

Dr. Abel Sanchez holds a Ph.D. from the Massachusetts Institute of Technology (MIT). He is the Executive Director of MIT's Geospatial Data Center, architect of "The Internet of Things" global network, and architect of data analytics platforms for SAP, Ford, Johnson & Johnson, Accenture, Shell, Exxon Mobil, and Altria. In cyber security, Dr. Sanchez architected impact analysis of large-scale cyber attacks designing Cyber Ranges for the Department of Defense (DOD). In password security, Dr. Sanchez led the design of a password firewall (negative authentication) for the Intelligence Advanced Research Projects Activity (IARPA) agency. In machine learning, addressing fraud detection, Dr. Sanchez designed a situational awareness framework that exploits different perspectives of the same data and assigns risk scores to entities for Accenture. He led the design of a global data infrastructure simulator, modeling follow-the-sun engineering, to evaluate the impact of competing architectures on the performance, availability and reliability of the system for Ford Motor Company. He has been involved in developing E-Educational software for Microsoft via their I- Campus Program and with establishing the Accenture Technology Academy, an online resource for over 200,000 employees. He has 10 years of experience with learning management systems and has made deployments in America, Asia, and Europe. He teaches MIT courses on cybersecurity, engineering computation, and data science and has produced over 150 educational videos.

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Join us for an exciting journey into the world of Generative AI, where algorithms become artists and imagination pushes the limits! Discover innovative tools and transformative ways Generative AI is revolutionizing creativity and pushing the limits of productivity far beyond our expectations.

MIT Startup Exchange Lightning Talks Ariadna Rodenstein Program Manager, MIT Startup Exchange



Ariadna Rodenstein Program Manager MIT Startup Exchange

Ariadna Rodenstein is a Program Manager at MIT Startup Exchange. She joined MIT Corporate Relations as an Events Leader in September 2019 and is responsible for designing and executing startup events, including content development, coaching and hosting, and logistics. Ms. Rodenstein works closely with the Industrial Liaison Program (ILP) in promoting collaboration and partnerships between MIT-connected startups and industry, as well as with other areas around the MIT innovation ecosystem and beyond.

Prior to working for MIT Corporate Relations, she worked for over a decade at Credit Suisse Group in New York and London, in a few different roles in event management and as Director of Client Strategy. Ms. Rodenstein has combined her experience in the private sector with work at non-profits as a Consultant and Development Director at New York Immigration Coalition, Immigrant Defense Project, and Americas Society/Council of the Americas. She also served as an Officer on the Board of Directors of the Riverside Clay Tennis Association in New York for several years. Additionally, she earned her B.A. in Political Science and Communications from New York University, with coursework at the Instituto Tecnológico y de Estudios Superiores de Monterrey in Mexico City, and her M.A. in Sociology from the City University of New York.

Layla Shaikley Co-founder and Head of Product Wise Systems

Markus Gürster Founder and CEO MontBlancAI

Yudong Cao Co-founder and CTO Zapata Al

Gant Redmon CEO Hopara

Michael Fleder Founder and CEO Covariance

Jay Liu Co-founder and CEO CoCoPIE

Anuraag Singh Co-founder and CTO TechNext

Anuj Bhalla Founder and CEO <u>serviceMob</u>

Chen Lu Machine Learning Engineer Cleanlab

Paul Yang Data Scientist Einblick Participating startups listed above will be joined by:

• <u>Ikigai Labs</u>: One Click AI - No-Code AI Powered Data Platform for Operation Teams

2:00 PM

Afternoon Introduction
Peter Lohse
Program Director, MIT Corporate Relations



Peter Lohse
Program Director, MIT Corporate Relations

Dr. Peter Lohse joined the Office of Corporate Relations (OCR) in October 2018 as Program Director.

Lohse comes to OCR with deep and broad knowledge and expertise in the pharma, biotech, and other life sciences-driven industries including agro, nutrition, chemical, and consumer products. As a scientist and entrepreneur, he has an extensive background developing business and managing partnerships with large corporations, early-stage companies, academia, and non-profit organizations. Most recently, Lohse was V.P., Operations and Business Development for InnovaTID Pharmaceuticals in Cambridge. Before that, he was a Strategy Consultant for Eutropics Pharmaceuticals, an emerging biotech company in Cambridge.

Prior to this, Dr. Lohse was Director, Scientific Operations & Innovation Program Director for Eli-Lilly's open innovation platform, InnoCentive, Inc. in Waltham. Earlier in his career, he held positions with increasing responsibility at ArQule of Woburn, Phylos in Lexington, and Novartis Pharma in Switzerland.

Lohse earned his M.S., Chemistry & Applied Sciences and his Ph.D., Organic Chemistry at Federal institute of Technology (ETH) in Switzerland. He earned his M.B.A., Strategy, Finance, Marketing as a Sloan Fellow at MIT. He also held the position Research Fellow, Molecular Biology at Harvard Medical School - Massachusetts General Hospital, Boston (with Professor J. Szostak, Nobel Prize 2009), This was a Swiss National Science Foundation Postdoctoral Fellowship -- In vitro selection of functional RNAs.

Al Ethics and Ethical Computing Platform
Julie Shah
Interactive Robotics Group Leader, MIT CSAIL
H.N. Slater Professor, MIT Department of Aeronautics and Astronautics



Julie Shah Interactive Robotics Group Leader, MIT CSAIL H.N. Slater Professor MIT Department of Aeronautics and Astronautics

Julie Shah is the H.N. Slater Professor of Aeronautics and Astronautics at MIT and leads the Interactive Robotics Group of the Computer Science and Artificial Intelligence Laboratory. Shah received her SB (2004) and SM (2006) from the Department of Aeronautics and Astronautics at MIT, and her PhD (2010) in Autonomous Systems from MIT. Before joining the faculty, she worked at Boeing Research and Technology on robotics applications for aerospace manufacturing. She has developed innovative methods for enabling fluid humanrobot teamwork in time-critical, safety-critical domains, ranging from manufacturing to surgery to space exploration. Her group draws on expertise in artificial intelligence, human factors, and systems engineering to develop interactive robots that emulate the qualities of effective human team members to improve the efficiency of human-robot teamwork. In 2014, Shah was recognized with an NSF CAREER award for her work on "Human-aware Autonomy for Team-oriented Environments," and by the MIT Technology Review TR35 list as one of the world's top innovators under the age of 35. Her work on industrial human-robot collaboration was also recognized by the Technology Review as one of the 10 Breakthrough Technologies of 2013, and she has received international recognition in the form of best paper awards and nominations from the International Conference on Automated Planning and Scheduling, the American Institute of Aeronautics and Astronautics, the IEEE/ACM International Conference on Human-Robot Interaction, the International Symposium on Robotics, and the Human Factors and Ergonomics Society.

Panel Discussion: What Should be the Role of AI in Digital Business Transformation? Michael Schrage

Research Fellow, MIT Initiative on the Digital Economy, MIT Sloan School of Management



Michael Schrage
Research Fellow, MIT Initiative on the Digital Economy
MIT Sloan School of Management

Michael Schrage is a research fellow with the MIT Sloan School of Management's Initiative on the Digital Economy. His research, writing, and advisory work focuses on the behavioral economics of models, prototypes, and metrics as strategic resources for managing innovation risk and opportunity. He is author of the award-winning book The Innovator's Hypothesis (MIT Press, 2014), Who Do You Want Your Customers to Become? (Harvard Business Review Press, 2012), and Serious Play (Harvard Business Review Press, 2000). His latest book, Recommendation Engines, was published in September 2020 by MIT Press as part of its Essential Knowledge series. He's done consulting and advisory work for Microsoft, Procter & Gamble, British Telecom, BP, Siemens, Embraer, Google, iRise, the Office of Net Assessment, and other organizations

Schrage has run design workshops and executive education programs on innovation, experimentation, and strategic measurement for organizations all over the world and is currently pioneering work in selvesware technologies designed to augment aspects, attributes, and talents of productive individuals. He is particularly interested in the future coevolution of expertise, advice, and human agency as technologies become smarter than the people using them.

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Lucy Tancredi Senior Vice President, Strategic Initiatives - Technology FactSet

Sreedhar Sistu Vice President, Al Offers Schneider Electric

Gabriela Styf Sjoman Managing Director Research and Network Strategy BT Group

Fabio Di Memmo Global Vice President of Digitalization Aptar Group

3:35 PM The MIT.nano Immersion Lab

3:40 PM Networking Break

What Top Leaders Need to Know About Al George Westerman Senior Lecturer, MIT Sloan School of Management

Founder, Global Opportunity Forum, MIT Office of Open Learning



George Westerman

Senior Lecturer, MIT Sloan School of Management
Founder, Global Opportunity Forum, MIT Office of Open Learning

George Westerman is a Senior Lecturer at the MIT Sloan School of Management and Founder of the Global Opportunity Forum (http://gof.mit.edu).

George's work bridges the fields of executive leadership and technology strategy. During more than 20 years with MIT Sloan School of Management, he has written three award-winning books, including *Leading Digital: Turning Technology Into Business Transformation*. As a pioneering researcher on digital transformation, George has published papers in *Harvard Business Review*, *Sloan Management Review*, and other top journals. He is now focused on helping employers, educators, and other groups to rethink the process of workforce learning around the world through the GOF and several research collaborations.

George is cochair of the MIT Sloan CIO Leadership Awards, a member of the Digital Strategy Roundtable for the US Library of Congress, and member of the Board of Directors for Workcred. He works frequently with senior management teams and industry groups around the world. Prior to earning a Doctorate from Harvard Business School, he gained more than 13 years of experience in product development and technology leadership roles.

View full bio

The transformative potential and risks of AI go well beyond the technology itself. But senior executives can be forgiven if they can't stay current with the fast-multiplying set of AI tools and capabilities. Happily, you don't have to master the complex details of the AI landscape. But you do need to know enough to understand the challenges and opportunities arising from AI. In this session, we'll provide an executive-level overview of key categories of AI. We'll explore practical applications of digital transformation with AI. And we'll delve into key challenges and considerations surrounding AI implementation. This is not a technical discussion; it's a leadership one. By the end of this session, you'll be ready to ask the right questions and make the right decisions about how to lead your organization through the AI revolution.

Redefining Talent: Al's Impact on Your Workforce Nick van der Meulen

Research Scientist, Sloan Center for Information Systems Research



Nick van der Meulen Research Scientist, Sloan Center for Information Systems Research

Dr. Nick van der Meulen is a Research Scientist at the MIT Sloan Center for Information Systems Research (MIT CISR). He conducts academic research that targets the challenges of senior level executives at MIT CISR's member companies, with a specific interest in how companies need to organize themselves differently in the face of continuous technological change. His work on digital workplaces and the employee experience resulted in a range of academic and industry publications, in outlets such as the *Journal of Information Technology, MIS Quarterly Executive*, and the *European Business Review*. Currently, he examines how organizations are developing a skilled workforce with the decision rights to rapidly adapt to changes in both innovative and cost-effective ways.

Nick earned his PhD in Business and Management from the Rotterdam School of Management, Erasmus University. Prior to joining MIT CISR, he was a faculty member at the University of Amsterdam.

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In the face of relentless technological change, an organization's resilience hinges on its ability to adeptly transform its workforce. As such, bridging technical skills gaps and navigating shifting employee expectations have become necessities—not options. In this session, we'll unpack diverse strategies for addressing these challenges, and explore the pivotal role of AI in redefining talent management strategies. You'll leave with practical insights into how organizations are handling the talent-related challenges and opportunities that AI brings.

5:25 PM

Adjournment with Networking Reception

Day 2 | Thursday October 26, 2023

8:15 AM

Registration and Light Breakfast

Opening Remarks
John Roberts
Executive Director (Interim), MIT Corporate Relations



John Roberts Executive Director (Interim) MIT Corporate Relations

John Roberts has been Executive Director of MIT Corporate Relations (Interim) since February 2022. He obtained his Ph.D. in organic chemistry at MIT and returned to the university after a 20-year career in the pharmaceutical industry, joining the MIT Industrial Liaison Program (ILP) in 2013. Prior to his return, John worked at small, medium, and large companies, holding positions that allowed him to exploit his passions in synthetic chemistry, project leadership, and alliance management while growing his responsibilities for managing others, ultimately as a department head. As a program director at MIT, John built a portfolio of ILP member companies, mostly in the pharmaceutical industry and headquartered in Japan, connecting them to engagement opportunities in the MIT community. Soon after returning to MIT, John began to lead a group of program directors with a combined portfolio of 60-80 global companies. In his current role, John oversees MIT Corporate Relations which houses ILP and MIT Startup Exchange.

Hong Fan Program Director, MIT Corporate Relations



Hong Fan Program Director MIT Corporate Relations

Hong Fan is a Program Director at the Office of Corporate Relations at MIT. She joined OCR in August 2016, brought with her 20+ years of international work experience across semiconductor, consumer electronics, telecom, and higher education.

Prior to joining OCR, Hong spent 12 years in the semiconductor industry with executive functions in strategic marketing, business development, corporate strategy, product management, and product marketing at Analog Devices and MediaTek. During those years, Hong played instrumental roles in identifying emerging business opportunities related to wireless communication networks, smartphones, wearable devices, Internet of Things (IoT), and medical devices and applications. She led cross-functional teams in defining and driving product and market strategy for businesses with annual revenue ranging from \$30 million to \$100 million.

Prior to joining the semiconductor industry, Hong spent 6 years in the telecommunications and electronics industry, leading engineering teams at companies such as Lucent Technologies and Watkins-Johnson Company for the development of digital signal processing, wireless communications, and micro-controller software.

Before coming to US, Hong was a strategic research staff at the President Office of Shanghai Jiao Tong University, one of the oldest universities in China. She was the first woman to hold this highly selective position.

Hong has a B.S in Electronic Engineering from Shanghai Jiao Tong University, an M.S. in Electrical Engineering from University of Maryland at College Park, and an MBA from Sloan School of Management at MIT. She received numerous academic honors and awards including the McKinsey & Co. Scholarship, the NSF Graduate Research Fellowship, and the Shanghai Outstanding College Graduate Award.

Introduction to the MIT Media Lab Workshop on Generative AI and Its Impact on Society Dava Newman

Apollo Professor of Astronautics



Dava Newman Apollo Professor of Astronautics Director MIT Media Lab

Dava Newman is the director of the MIT Media Lab. She holds the Apollo Program Professor of Astronautics chair at the Massachusetts Institute of Technology (MIT) and is a Harvard–MIT Health, Sciences, and Technology faculty member in Cambridge, Massachusetts. She was named a MacVicar Faculty Fellow (a chair for making significant contributions to undergraduate education); and was the former Director of the Technology and Policy Program at MIT (2003–2015); and Director of the MIT–Portugal Program (2011–2015, 2017-2021). As the Director of MIT's Technology and Policy Program (TPP), she led this unique multidisciplinary graduate program with over 1,300 alums and faculty advisors from all 5 Schools across the Institute. She has been a faculty leader in Aeronautics and Astronautics and MIT's School of Engineering for 29 years. She holds a top-secret clearance.

The MIT Media Lab's vision is to create transformative technologies, experiences, and systems that enable people to reimagine and redesign their lives. We engage people everywhere in meaningful, creative experiences integrating art, science, design, and engineering.

The Media Lab along with partners across MIT are active participants in remarkable times. All is changing the way we work, study, communicate, care for one another and create art. Dava Newman, Media Lab Director and MIT Apollo professor of Astronautics will introduce this Generative All and Its Impact on Society workshop to spark a conversation among our academics and industry partners on the future of Al. We will discuss the current state, capabilities, and how we can work together to create a better future by, with and for all.

Lightning Talks by MIT Media Lab AI Faculty Andrew Lippman Senior Research Scientist Head, <u>Viral Communications Research Group</u> Andrew Lippman Senior Research Scientist Head Viral Communications Research Group

Andrew Lippman has a more than 35-year history at MIT. His work at the Media Lab has ranged from wearable computers to global digital television. Currently, he heads the Lab's Viral Communications research group, which examines scalable, real-time networks whose capacity increases with the number of members. This new approach to telephony, sensor interconnection, and broadcasting transfers "mainframe communications" technology to distributed, personally defined, cooperative communicators. In addition, he co-directs MIT's interdisciplinary Communications Futures program. Lippman has directed research programs on digital pictures, personal computers, entertainment, and graphics, and he has served on advisory boards of technology start-ups. Currently, he is on the science councils of both non-profit and for-profit companies addressing global information infrastructures. He has written both technical and lay articles about our digital future and given over 250 presentations throughout the world on the future of information and its commercial and social impact. Lippman received both his BS and MS in electrical engineering from MIT. In 1995 he completed his PhD studies at the EPFL, Lausanne, Switzerland.

View full bio Pattie Maes

Germeshausen Professor, Professor of Media Technology, Head, Fluid Interfaces Research Group



Pattie Maes

Germeshausen Professor, Professor of Media Technology, Head, Fluid Interfaces Research Group

Pattie Maes is the Germeshausen Professor of Media Arts and Sciences at the MIT Media Lab. She runs the Fluid Interfaces research group, which does research at the intersection of Human Computer Interaction and Artificial Intelligence with a focus on applications in health, wellbeing and learning. Maes is also a faculty member in MIT's center for Neuro-Biological Engineering. She is particularly interested in the topic of cognitive enhancement, or how wearable, immersive and brain-computer interface systems can actively assist people with issues such as memory, attention, learning, decision making, communication, wellbeing, and sleep.

Maes is the editor of four books, and is an editorial board member and reviewer for numerous professional journals and conferences. She has received several awards: Netguru selected her for "Hidden Heroes: the people who shaped technology (2022), Time Magazine has included several of her designs in its annual list of inventions of the year; AAAI gave her the "classic paper 2012" prize, awarded to the most influential AI paper of the year, Fast Company named her one of 50 most influential designers (2011); Newsweek picked her as one of the "100 Americans to watch for" in the year 2000; TIME Digital selected her as a member of the "Cyber Elite," the top 50 technological pioneers of the high-tech world; the World Economic Forum honored her with the title "Global Leader for Tomorrow"; Ars Electronica awarded her the 1995 World Wide Web category prize; and in 2000 she was recognized with the "Lifetime Achievement Award" by the Massachusetts Interactive Media Council. She also received honorary doctorates from the Vrije Universiteit Brussel in Belgium and Open Universiteit, Netherlands, and has given several TED talks.

In addition to her academic endeavors, Maes has been an active entrepreneur as co-founder of several venture-backed companies, including Firefly Networks (sold to Microsoft), Open Ratings (sold to Dun & Bradstreet) and Tulip Co (privately held). She is an advisor to several early stage companies, including Earable, Inc, and Spatial, Inc. Prior to joining the Media Lab, Maes was a visiting professor and a research scientist at the MIT Artificial Intelligence Lab. She holds a bachelor's degree in computer science and a PhD in artificial intelligence from the Vrije Universiteit Brussel in Belgium.

View full bio
Cynthia Breazeal
MIT Dean for Digital Learning
Director RAISE
Professor of Media Arts and Sciences

10:40 AM

Demos of Media Lab Generative Al Research & Coffee Break

Fluid Interfaces

- * Human-Al co-reasoning Valdemar Danry

 * How does the design of Human-Al interaction affect outcomes? Ruby Liu
- * Personal Al for enhancing memory and wellbeing Wazeer Zulfikar and Samantha Chan
- * Augmenting conversations with pro-active, context-aware AI Cayden Pierce
- * Creating personalized learning experiences with AI Joanne Leong
- * Speaking virtual worlds into existence with large language models Cathy Fang
- * Can virtual Al characters be used for Good? Pat Pataranutaporn

Personal Robots

* Social Robots as Social Proxies for Fostering Human-Human Connection and Empathy Across Personal Stories - Jocelyn Shen

Viral Communications

* Latent Lab - Kevin Dunnell and Andy Lippman

Camera Culture

* Decentralized Artificial Intelligence - Abhishek Singh

Parallel Workshops Run by Media Lab Faculty and Their Research Teams

Andrew Lippman

Senior Research Scientist

Head, Viral Communications Research Group

Andrew Lippman

Senior Research Scientist

Head

Viral Communications Research Group

Andrew Lippman has a more than 35-year history at MIT. His work at the Media Lab has ranged from wearable computers to global digital television. Currently, he heads the Lab's Viral Communications research group, which examines scalable, real-time networks whose capacity increases with the number of members. This new approach to telephony, sensor interconnection, and broadcasting transfers "mainframe communications" technology to distributed, personally defined, cooperative communicators. In addition, he co-directs MIT's interdisciplinary Communications Futures program. Lippman has directed research programs on digital pictures, personal computers, entertainment, and graphics, and he has served on advisory boards of technology start-ups. Currently, he is on the science councils of both non-profit and for-profit companies addressing global information infrastructures. He has written both technical and lay articles about our digital future and given over 250 presentations throughout the world on the future of information and its commercial and social impact. Lippman received both his BS and MS in electrical engineering from MIT. In 1995 he completed his PhD studies at the EPFL, Lausanne, Switzerland.

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Interaction with a smart machine has been a dream since the dawn of the digital era. Now we can do it, not because AI is an answer machine, but because it is an inspiration machine. Here we explore how knowledge exploration can prompt new ideas for people in areas of learning, planning and invention.

Pattie Maes

Germeshausen Professor, Professor of Media Technology, Head, Fluid Interfaces Research Group



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