MIT Industrial Liaison Program Faculty Knowledgebase Report

2023 MIT Startup Exchange Demo Day, Live from CA!

June 15, 2023 8:00 am - 6:00 pm

8:00 AM

Registration & Networking

Opening Remarks

Rebecca McCathern Head of People Samsung Electronics

Todd Glickman Senior Director, MIT Corporate Relations



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Prior to joining ILP, Todd was Assistant Executive Director of the American Meteorological Society (AMS), the professional society for meteorologists, which is based in Boston. At AMS, Todd's responsibilities included strategic planning for conferences, headquarters' liaison with AMS member boards and committees, support to the AMS Council, and public relations. In addition, Todd was Managing Editor for the AMS Glossary of Meteorology (2nd edition).

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Todd's interests include transportation systems of all types, and he is an officer and past-trustee of the Seashore Trolley Museum of Kennebunkport, Maine. At MIT, Todd an officer and trustee of the Technology Broadcasting Corporation, which oversees the campus radio station WMBR-FM. He also volunteers as the academic advisor to a group of MIT freshman.

Taegyun Moon Program Director, MIT Industrial Liasion Program



Taegyun Moon
Program Director
MIT Industrial Liasion Program

Dr. Taegyun Moon joined Corporation Relations in October 2021 as Program Director. Moon will be working in the Life Science group.

Dr. Moon left his current position as Chief Strategy Officer at Aspen Imaging Healthcare in Plano, TX. In his role at Aspen, he has led new business development and, among other accomplishments, launched a new product through his partnership with Samsung. With some authorized overlap with Aspen, Moon also led strategy and business development for NeuroNexus Technologies (a University of Michigan spinoff) in Ann Arbor. Before that, he spent more than five years with Samsung Economic Research institute in Seoul as a Principal Research Analyst focusing on medical devices, pharma, and the digital health industries. Other positions held include Consultant at Boston Consulting Group (Seoul),

9:05 AM

Keynote: Exciting Times in Semiconductors: Start-Ups are a Critical Catalyst For Growth

Martin Scott Sr. Technologist and VP, Samsung Catalyst Fund Samsung

9:15 AM

Keynote: The Geek Way Andrew McAfee

Co-Director & Tech for Good Research Group Lead, MIT Sloan School of Management



Andrew McAfee Co-Director & Tech for Good Research Group Lead MIT Sloan School of Management

Andrew McAfee is the Co-Director of the IDE and a Principal Research Scientist at the MIT Sloan School of Management,

His research investigates how information technology changes the way companies perform, organize themselves, and compete. At a higher level, his work also focuses on how computerization affects competition, society, the economy, and the workforce. In addition to having numerous papers published, McAfee also writes a widely read blog, which is at times one of the 10,000 most popular in the world. He is the author or co-author of more than 100 articles, case studies and other materials for students and teachers of technology. Prior to joining MIT Sloan, McAfee was a professor at Harvard Business School. He has also served as a fellow at the Berkman Center for Internet and Society at Harvard Law School. McAfee received his doctorate from Harvard Business School, and completed two Master of Science and two Bachelor of Science degrees at MIT. He speaks frequently to both academic and industry audiences, and has taught in executive education programs around the world.

View full bio

In this time of profound technological change and intense competition, what kinds of companies are going to win? In this talk, Dr. McAfee gives his answer. The winners will be those that follow the geek way: an interlinked set of practices that allow a company to be simultaneously agile, innovative, and efficient. These practices were largely developed at tech companies on the West Coast of the US, but they are spreading widely. The geeks have given the company an upgrade.

Startup Lightning Talks Session I 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.

Katie Hall Founder and CEO Claira

Jay Liu Co-founder and CEO CoCoPIE.ai

Zixiao Pan President Butlr

Tom Gurski Founder and CEO Blue Dot Motorworks

Lifeng Wang CEO Eion Technologies

10:35 AM Startup Q&A

11:00 AM Networking Break

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



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Ross Bonner CTO Transaera

Robert Deans Chief Technology Officer, and Co-inventor C2Sense

Aceil Halaby Founder and COO Bloomer Tech

David Spencer President and CEO SpencerMetrics

Ashwini Rao Co-founder and CEO Eydle

11:45 AM Startup Q&A

12:10 PM Lunch Exhibit

MC: Rebekah Miller Program Director, MIT Industrial Liaison Program



Rebekah Miller Program Director MIT Industrial Liaison Program

Rebekah Miller joined the Office of Corporate Relations team as a Program Director in March 2022. Rebekah brings to the OCR expertise in the life sciences and chemical industries as well as in applications including sensors, consumer electronics, semiconductors and renewable energy.

Prior to joining the OCR, Rebekah worked for over a decade at Merck KGaA, most recently as a Global Key Account Manager in the Semiconductor division. Rebekah also served as Head of Business and Technology Development for the Semiconductor Specialty Accounts, during which time she led strategic planning and technology roadmapping.

While at Merck KGaA, Miller established a strong track record in industry-university partnerships, corporate entrepreneurship, and innovation management, with experience in roles spanning Technology Scouting, Alliance Management, and New Business Development. Early in her career, she led early phase R&D projects as a member of the Boston Concept Lab, which focused on technology transfer from academia.

Miller earned her B.A. in Chemistry and Biology from Swarthmore College and her Ph.D. in Chemistry, with a Designated Emphasis in Nanoscale Science and Engineering, from the University of California, Berkeley. She first joined MIT as a postdoctoral associate in the Bioengineering and Material Science Departments.

The US Industrial Strategy Elisabeth B. Reynolds

Professor of the Practice, MIT Department of Urban Studies and Planning
Former Executive Director, MIT Task Force on the Work of the Future and IPC
Former Special Assistant to the President for Manufacturing and Economic Development



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Former Special Assistant to the President for Manufacturing and Economic Development

Elisabeth B. Reynolds, Ph.D., is Professor of the Practice at the MIT Department of Urban Studies and Planning. She was Special Assistant to President Biden for Manufacturing and Economic Development at the National Economic Council (NEC, 2021-2022) where she helped lead the Administration's work on national manufacturing strategy, supply chain resilience, and industrial strategy. Before working at the NEC, Reynolds was a Principal Research Scientist and executive director of the MIT Industrial Performance Center (2010-2021), an interdisciplinary research center focused on systems of innovation and industrial transformation. She also co-led the MIT Task Force on the Work of the Future (2018-2021) which examined the relationship between emerging technologies and work. Reynolds' work and research focus on systems of innovation and manufacturing including growing innovative firms to scale and digital technology adoption.

Reynolds has worked on rebuilding manufacturing capabilities in the U.S. in a number of capacities including advising three Massachusetts governors. She is on the board of the non-profits, Advanced Functional Fabrics of America (AFFOA) and the Advanced Regenerative Manufacturing Institute (ARMI) as well as an advisor to the Special Competitive Studies Project, a Washington think tank focused on national security and critical technologies.

Lenny Mendonca
Former Chief Economic and Business Adviser to Governor Gavin Newsom of California
Chair, California High-Speed Rail Authority
Senior Partner Emeritus
McKinsey & Company

Breakout Sessions - What's New at MIT. Intersection with Industry

The Future of Data and Super Computing are among the top research initiatives currently ongoing at MIT. Both have significant impact on the most diverse industry sectors. Each breakout session features an MIT faculty/researcher as well as an industry guest speaker. Speakers will share the breakthrough technologies being developed across campus, and practical use cases. The sessions will be followed by a Q&A with the audience.

Breakout 1: The Future of Data

Rebekah Miller

Program Director, MIT Industrial Liaison Program



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Taylor Reynolds
Technology Policy Director
MIT's Internet Policy Research Initiative

Zafer Sahinoglu General Manager Mitsubishi Electric Innovation Center (MELIC Ventures) Breakout 2: A New Approach to Super Computing Ariadna Rodenstein Program Manager, MIT Startup Exchange



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Vijay N. Gadepally Senior Scientist and Principal Investigator MIT Lincoln Laboratory

Application domains such as autonomous vehicles, recommender systems, airborne platforms use a variety of hardware platforms for the various phases of their lifecyle. Training Al models may occur in the high-performance computing or cloud environments but deployed to edge or serverless platforms. There are numerous differences between these platforms and many questions of efficiency and performance that arise when moving from one system to another. For example, what is the "right" hardware platforms to use when moving an application from the datacenter to edge platforms? The "right" platform my depend on the need to maximize power efficiency, maximize computing performance, or other application demands that are dynamic in nature. Our research has focused on developing new machine learning tools that can be used to help tailor hardware settings for different AI and scientific computing tasks. In this talk, I will discuss work related to improved power efficiency for datacenter and edge platforms, methods to include edge platforms such as serverless computing for HPC, and machine learning based strategies to tune heterogenous computing platforms for recommender systems. Finally, I will discuss environmental and carbon footprint impacts of high performance computing along with a community drive to standardize reporting.

Manisha Gajbe Principal Engineer, HPC Application Performance, Systems Architecture Lab Samsung Electronics

A growing number of classical HPC applications - modeling and simulation applications - are bottlenecked due to insufficient memory bandwidth. At the same time, Al applications, which are forming an increasingly important part of HPC, and compute in general, are often bottlenecked because of insufficient communication (node to node) bandwidth. In this talk, Manisha Gajbe will discuss the research we are undertaking to design the hardware and software architecture for HPC and Al applications to obtain the next level of exponential increase in performance. Gajbe will suggest a path forward based on leveraging tightly integrating memory and compute, called Memory Couple Compute (MCC), and describe the interesting design space that needs to be considered to make this architecture a reality. The architectural space is broad, so a key aspect of our investigation involves codesign involving application developers and system software with key users. Gajbe will describe how these architectural decisions can be influenced by codesign. A successful effort on this front will produce a MCC capability that has the potential to be the next discontinuity in HPC and Al.

3:15 PM Networking Break

3:35 PM Sustainability: The Backbone of the Future of Work

Gregoire Viasnoff Global Head of Incubation Practice of SE Ventures Schneider Electric Ventures

In this session, we will explore how sustainability has become the essential foundation for shaping the work landscape of tomorrow. Discover how integrating sustainable practices and principles can drive innovation, enhance productivity, and create a resilient and thriving operating model. Gain valuable insights, and real-world examples that will empower you to embrace sustainability as the driving force behind a prosperous and sustainable future of work.

Discussion Panel: Work of the Future Elisabeth B. Reynolds

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Jason Hipskind Vice President of Strategic Accounts Cogito

Winnie Tsou Senior Director Technology Strategy Unit Fujitsu

Gregoire Viasnoff Global Head of Incubation Practice of SE Ventures Schneider Electric Ventures

In 2018 MIT launched the Task Force on the Work of the Future to understand how emerging technologies are changing the nature of human work and the skills required—and how we can design and leverage technological innovations for the benefit of everyone in society. In this session, speakers from academia, a tech startup, and investment will share their views on trends and the impact of the growing adoption of new technologies in the workplace.

Adjourn Todd Glickman Senior Director, MIT Corporate Relations



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