

MIT Industrial Liaison Program Faculty Knowledgebase Report

2019 MIT Startup Ecosystem Conference

May 30, 2019 8:00 am - 6:00 pm

8:00am Registration and Breakfast

8:45am Welcome Remarks
Karl Koster
Executive Director, MIT Corporate Relations
Director, Alliance Management
MIT Office of Strategic Alliances & Technology Transfer



Karl Koster
Executive Director, MIT Corporate Relations
Director, Alliance Management
MIT Office of Strategic Alliances & Technology Transfer

Karl Koster is the Executive Director of MIT Corporate Relations. MIT Corporate Relations includes the MIT Industrial Liaison Program and MIT Startup Exchange.

In that capacity, Koster and his staff work with the leadership of MIT and senior corporate executives to design and implement strategies for fostering corporate partnerships with the Institute. Koster and his team have also worked to identify and design a number of major international programs for MIT, which have been characterized by the establishment of strong, programmatic linkages among universities, industry, and governments. Most recently these efforts have been extended to engage the surrounding innovation ecosystem, including its vibrant startup and small company community, into MIT's global corporate and university networks.

Koster is also the Director of Alliance Management in the Office of Strategic Alliances and Technology Transfer (OSATT). OSATT was launched in Fall 2019 as part of a plan to reinvent MIT's research administration infrastructure. OSATT develops agreements that facilitate MIT projects, programs and consortia with industrial, nonprofit, and international sponsors, partners and collaborators.

He is past chairman of the University-Industry Demonstration Partnership (UIDP), an organization that seeks to enhance the value of collaborative partnerships between universities and corporations.

He graduated from Brown University with a BA in geology and economics, and received an MS from MIT Sloan School of Management. Prior to returning to MIT, Koster worked as a management consultant in Europe, Latin America, and the United States on projects for private and public sector organizations.

8:55am

MIT Startup Exchange
Rebecca Xiong

Program Director, MIT Startup Exchange

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Program Director, MIT Startup Exchange

Dr. Rebecca Xiong joined Corporate Relations as Program Director, Startup Exchange in October 2018.

Dr. Xiong comes to Corporate Relations with more than 15 years of experience in the MIT Startup Ecosystem, having co-founded and worked at multiple MIT startups. Most recently, as Co-founder and Chief Scientist at SocMetrics, she leads product management, data science, and machine learning for SocMetric's personalization and marketing campaign products. Before SocMetrics, Xiong co-founded Going.com. Going.com connected people via local events to enhance their offline social life, and through Rebecca's leadership grew to 1M members, tens of millions of monthly pageviews, and finally its acquisition by AOL. Before these two entrepreneurial endeavors, Xiong held positions as Product Marketing Manager (DataPower, acquired by IBM), Senior Program Manager (Performaworks, acquired by Workscape), and Team Lead (Akamai Technologies). She also has research experience at Microsoft, Silicon Graphics, and Xerox Palo Alto Research Center.

Dr. Xiong earned her B.S. in Computer Science at the University of California at Berkeley, and her Ph.D. in Computer Science at the Media Lab at MIT with her thesis "Visualizing Information Spaces to Enhance Social Interaction." She was a National Science Foundation (NSF) Fellowship Recipient. She holds multiple patents and is very involved in the community, as the Lead Organizer of the Cambridge Parent Summit.

Marcus Dahllöf
Program Director, [MIT Startup Exchange](#)



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Marcus Dahllöf leads MIT Startup Exchange, which facilitates connections between MIT-connected startups and corporate members of the MIT Industrial Liaison Program (ILP). Dahllöf manages networking events, workshops, the STEX25 accelerator, opportunity postings, and helps define the strategic direction of MIT Startup Exchange. He is a two-time tech entrepreneur (one exit in cybersecurity), and has previously held roles in finance, software engineering, corporate strategy, and business development at emerging tech companies and Fortune 100 corporations in the U.S., Latin America, and Europe. Marcus was a member of the Swedish national rowing team and he is a mentor at the MIT Venture Mentoring Service.

9:05am

A Catalyst for Innovation
Gururaj "Desh" Deshpande
President & Chairman, [Sparta Group LLC](#)



Gururaj "Desh" Deshpande
President & Chairman
[Sparta Group LLC](#)

Gururaj "Desh" Deshpande is a Trustee of the Deshpande Foundation along with his wife Jaishree. He is also the President and Chairman of Sparta Group LLC, a family investment office and is also the Chairman of Tejas Networks.

Dr. Deshpande has pursued an entrepreneurial career for the last three decades. He is involved either as the founder, a founding investor or chairman of several companies including Cascade Communications, Sycamore Networks, Coral Networks, Tejas Networks, Cimaron, Webdialogs, Airvana, Sandstone Capital, A123 Systems and Curata.

Dr. Deshpande lives in Boston and serves as a life-member of the MIT Corporation, and his support has made possible MIT's Deshpande Center for Technological Innovation.

The Deshpande Foundation strengthens ecosystems that create significant social and economic impact through entrepreneurship and innovation. Leveraging the experience gained at the MIT Center, the Deshpande Foundation has facilitated the setup of five other centers; Deshpande Center for Social Entrepreneurship in India, EforAll (formerly known as the Merrimack Valley Sandbox) in Lowell/Lawrence Massachusetts, the Pond-Deshpande Center at the University of New Brunswick in Canada, the Dunin Deshpande Queens Innovation Center at Queens University in Kingston, Ontario and the Gopalakrishnan Deshpande Center for Innovation and Entrepreneurship at the Indian Institute of Technology, Madras, India. Deshpande Foundation also provided the founding grant for MassChallenge in Boston, National Science Foundation Innovation Corps (I-Corps™), Public Health Foundation of India (PHFI) and the UPOP program at MIT.

Dr. Deshpande holds a B. Tech. in Electrical Engineering from the Indian Institute of Technology - Madras, an M.E. from the University of New Brunswick in Canada, and Ph.D. from Queens University in Canada.

Deshpande co-chaired the National Council to support President Obama's innovation and entrepreneurship strategy from 2010 to 2015.

Desh will cover his experience catalyzing innovation as a company founder, investor, philanthropist and board member. What are the key ingredients for innovation? What are commonalities among innovative companies? How can one create innovation that is impactful and lasting in the marketplace?

9:35am

Startup Lightning Talks Part I - Data and AI
Rei Goffer
Cofounder & Chief Strategy Officer, [ClimaCell](#)



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Cofounder & Chief Strategy Officer
[ClimaCell](#)

Rei Goffer is the cofounder and chief strategy officer of ClimaCell. He served for ten years in the Israeli Air-Force as an F-16 Navigator and held managerial positions in the joint-operations unit and R&D department. Goffer holds a BA in economics from Ben Gurion University, an MBA from MIT Sloan, and an MPA from Harvard Kennedy School.

[Bo Zhu](#)
CTO, [BlinkAI](#)



Bo Zhu
CTO
[BlinkAI](#)

Bo Zhu is the CTO of BlinkAI, a spinoff from imaging research he proposed as a postdoctoral research fellow at Harvard and published in *Nature*. This revolutionary technique rethinks the conventional image reconstruction signal processing pipeline with a fully automated deep learning approach based on human perceptual learning, significantly improving image quality from rapidly acquired low-quality raw data. Zhu received his SB and MEng in electrical engineering from MIT and PhD in biomedical engineering at the Harvard-MIT Division of Health Sciences and Technology (HST). At BlinkAI, he leads the development of machine learning techniques to accelerate high-fidelity CMOS image acquisition and reconstruction in difficult environments using efficient inference that can be deployed on mobile and embedded systems.

Daisy Zhou
Cofounding Partner, [Interpretable AI](#)
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Cofounding Partner
[Interpretable AI](#)

Daisy Zhou is a cofounding partner of Interpretable AI. She has extensive experience developing business solutions using advanced predictive and prescriptive analytics and AI systems in a variety of industries, including healthcare, banking, insurance, and information technology. She holds a PhD in operations research from MIT, during which she developed a range of cutting-edge machine learning techniques such as Optimal Imputation and Robust Classifications, with publications in top academic journals.

Ryan Davis
CEO, [Secure AI Labs](#)



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CEO
[Secure AI Labs](#)

Ryan Davis is the CEO of SAIL and a graduate fellow from MIT Sloan. Secure AI Labs (SAIL) helps businesses access unshared data by protecting data during analysis. Advancing the same technology used to protect movie streaming, SAIL protects data by digitally enforcing data-use policies. Now data owners can control who, how and where their data is used, even after sharing, and businesses can access data as easily as renting a

10:00am

Creating an Entrepreneurial Culture

Rana el Kaliouby
Cofounder & CEO, [Affectiva](#)



Rana el Kaliouby
Cofounder & CEO
[Affectiva](#)

Pioneer of Emotion AI, Rana el Kaliouby is Affectiva's co-founder and CEO. She invented Affectiva's emotion recognition technology and is leading innovations in Emotion AI. An *Inc.* magazine columnist and recipient of numerous awards, el Kaliouby is frequently covered in leading publications and is a sought after speaker on topics of AI, ethics, and workforce. She is a passionate advocate for women in STEM and has a PhD from Cambridge University.

Ten years ago, Dr. Rana el Kaliouby spun Affectiva out of the MIT Media Lab. On a mission to humanize technology, Dr. el Kaliouby has raised over \$50 million in venture funding and is one of few women leading an AI company. Affectiva created the new technology category of Emotion AI and is the pioneer of Human Perception AI, software that detects complex and nuanced emotions and cognitive states. Dr. el Kaliouby will share her best practices for creating an entrepreneurial culture that fosters creativity and innovation.

10:20am

Startup Lightning Talks Part II - Smart Manufacturing

Derik Pridmore
Cofounder & CEO, [Osaro](#)



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Cofounder & CEO
[Osaro](#)

Derik Pridmore is an entrepreneur and cofounder and CEO of Osaro, a San Francisco-based machine learning company building vision and control software for industrial robotic systems. Previously, Pridmore was a principal at Founders Fund, a Silicon Valley venture fund led by PayPal founder Peter Thiel. At Founders Fund, he drove investments in a variety of companies, including DeepMind, where he worked closely with the founding team. Pridmore is also an investor in New York-based deep learning startup Clarifai. Prior to Osaro, he founded and managed Arda Capital Management, a quantitative equity hedge fund. Pridmore holds a BS in physics and computer science and an MEng in computer science and electrical engineering from MIT.

Ophir Gaathon
Cofounder & CEO, [DUST Identity](#)



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[DUST Identity](#)

Ophir Gaathon has led DUST Identity's interdisciplinary team since its formation and through several successful DARPA programs. He is a subject matter expert in diamond nano-engineering with over a decade of hands-on experience. Gaathon received his PhD from Columbia University, where he developed novel methods to realize the next generation sensors and computing platforms using diamonds. He is an author of over 30 publications and co-inventor of technologies related to hardware security, diamond processing, and imaging. Gaathon maintains a research affiliation at the Quantum Engineering Group at MIT.

Lael Odhner
Cofounder & CTO, [RightHand Robotics](#)
Matt Reynolds
Founder & CEO, [ThruWave](#)



Matt Reynolds
Founder & CEO
[ThruWave](#)

Matt Reynolds is founder and CEO of ThruWave Inc., and an Associate Professor in the Department of Electrical and Computer Engineering at the University of Washington. Reynolds received his PhD from the MIT Media Lab in 2003, where he was a Motorola Fellow, as well as SB and MEng degrees in electrical engineering and computer science from MIT. He also co-founded and served as CTO of the RFID systems firm ThingMagic Inc. (acquired by Trimble Navigation), the energy conservation firm Zensi (acquired by Belkin), and the home sensing company SNUPI Inc. (acquired by Sears). Reynolds is a Senior Member of the IEEE, and has received five Best Paper awards, the ACM Ubicomp 10-Year Impact Award, and has 56 issued US patents and over 75 pending patent applications.

Davide Marini
Cofounder & CEO, [Inkbit](#)



10:45am

Networking Break

11:15am

Solving Industry Challenges with MIT Faculty

Luca Marighetti

Managing Director, Group Head Tech Transformation, [Swiss Re Management](#)



Luca Marighetti

Managing Director, Group Head Tech Transformation

[Swiss Re Management](#)

Luca Marighetti has nearly 30 years of professional experience in a large variety of industries, in geopolitical matters, and in tech. He held a number of roles first in Academia, then at Procter & Gamble (European Brand Manager), SC Johnson (Commercial Director Central Europe), McKinsey & Company (Assembly, R&D, Chemicals, Banking), Deutsche Bank (global head of on-line trading, investment products), Allianz Group (market management across all banking segments and first hand management during the financial crisis), Zurich Insurance (Group Head of Strategy and Tech), and now Swiss Re, where he developed the tech strategy for the Group and is now leading its implementation.

How can industry-leading corporations engage with academia to solve strategic challenges that affect their industries? How does one frame a challenge to motivate the brightest minds? What are the pitfalls to avoid? Luca has lead strategy, digital transformation, and innovation initiatives in the insurance industry over the last decade. In his role at SwissRe, Luca successfully partnered with MIT Professor Dimitris Bertsimas to solve an industry wide challenge. The partnership led to the creation of new technology and a startup.

11:35am

Panel Discussion: Startup-Corporate Partnerships

Marcus Dahllöf

Program Director, [MIT Startup Exchange](#)



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Ali Azarbayejani

CTO, [Cogito](#)



Ali Azarbayejani

CTO

[Cogito](#)

Ali Azarbayejani is CTO at Cogito. He has 18 years of commercial experience as a scientist, entrepreneur, and designer of world-class computational technologies. Azarbayejani's pioneering doctoral research at the MIT Media Lab in probabilistic modeling for 3-D vision was the basis for his first startup company, Alchemy 3D Technology, which created the market in the film and video post-production industry for camera match-moving software. He also has consulted in software development and business strategy and has been on the research staff at Mitsubishi Electric Research Labs.

Nazeer Bhore

Global Manager, Technology Scouting and Venturing, [ExxonMobil](#)



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[ExxonMobil](#)

Nazeer has 25 years experience in Technology and Business in Refining, Petrochemical, Fuels and Lubes Products and Energy Industry. Experience ranges from research, development, deployment, planning and operations - at BU and corporate level. Recognized Leader in Improving Innovation and Breakthrough Capabilities of Organizations.

Rei Goffer

Cofounder & Chief Strategy Officer, [ClimaCell](#)



12:05pm

Startup Lightning Talks Part III - New Frontiers

Shreya Dave
CEO, [Via Separations](#)



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[Via Separations](#)

Shreya Dave graduated with her PhD in mechanical engineering from MIT and currently serves as the CEO of Via Separations. Her PhD research focused on the design and manufacture of graphene oxide membranes for water filtration, including the first atomic imaging of graphene oxide, a functional proof-of-concept membrane design, and path-defining economic analysis of membranes at the system level. Via Separations is now scaling this technology for manufacturing process intensification. She is passionate about interdisciplinary creativity, building things, and educating people, and was recently awarded Technology Review's 35 Innovators under 35. She also holds Bachelors and Masters' degrees from MIT in mechanical engineering and technology & policy.

Long Phan
Cofounder & CEO, [Top Flight Technologies](#)



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Dr. Long Phan leads research, product development, strategic software, and services partnerships to be used in Top Flight Technologies' products. Phan has over 20 years of experience in the field of robotics and autonomous systems. At MIT, he was an initial member of the MIT/Draper Aerial Robotics team that was the first in the world to demonstrate a fully autonomous helicopter from takeoff to landing. He is also a veteran on Wall Street, where he was an early pioneer in remote algorithmic trading systems, high frequency trading, and a high volume contributor on the NYSE (over 1% daily volume). Phan is a visionary and passionate entrepreneur who enjoys solving some of the most challenging problems in the world. He received his BS, MS, and PhD in mechanical engineering from MIT.

Tim Hirzel
VP of Engineering, [Zapata Computing](#)



Tim Hirzel
VP of Engineering
[Zapata Computing](#)

Tim Hirzel is the VP of Engineering at Zapata Computing. With a BA in computer science from Harvard University and MS from MIT's Media Lab, he has been a software engineer and architect in science-based technology startups since 2005. Today he is focused on delivering an enterprise grade quantum computing platform for Zapata and its customers.

Hyunjun Park
Cofounder & CEO, [CATALOG](#)



12:30pm

Lunch with Startup Exhibition

2:00pm

Innovating in a Startup
Ali Azarbayejani
CTO, [Cogito](#)



Ali Azarbayejani
CTO
[Cogito](#)

Ali Azarbayejani is CTO at Cogito. He has 18 years of commercial experience as a scientist, entrepreneur, and designer of world-class computational technologies. Azarbayejani's pioneering doctoral research at the MIT Media Lab in probabilistic modeling for 3-D vision was the basis for his first startup company, Alchemy 3D Technology, which created the market in the film and video post-production industry for camera match-moving software. He also has consulted in software development and business strategy and has been on the research staff at Mitsubishi Electric Research Labs.

What happens when a startup matures? How does it continue to generate innovative products? At what point does it need to create innovation processes while also remaining focused on existing business? Cogito was founded in 2006 as a health tech company, co-founded by Professor "Sandy" Pentland, one of the most entrepreneurial faculty at MIT. Cogito has since evolved to a company that provides augmented emotional intelligence and coaching to call center users, raising a total of \$72.5M. Ali, cofounder and CTO, will share insights into how the company continues to roll out innovative products as it grows and matures.

2:20pm

Building an Innovation Ecosystem: MIT's future vision of Kendall Square and beyond
Israel Ruiz
Executive Vice President and Treasurer



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Executive Vice President and Treasurer

Israel Ruiz is the Executive Vice President and Treasurer (EVPT) of the Massachusetts Institute of Technology (MIT). Mr. Ruiz is the Institute's chief financial officer and, as a trustee of the MIT Corporation and a member of its Executive Committee, is the chief steward of \$21.5 billion of MIT's financial assets, \$3.6 billion in operating revenues and is responsible for administering the Institute's \$5 billion capital plan through 2030.

He is responsible for financial and debt strategy development, budget and capital planning, and the integrity of financial information. Other administrative areas of responsibility include human resources, information systems, campus facilities, security and safety, compliance, government relations, international support, sustainability, and medical.

Prior to becoming Executive Vice President and Treasurer in 2011, Mr. Ruiz held several roles of increasing responsibility at MIT, most recently serving as Vice President of Finance. He previously held management and engineering roles at Hewlett-Packard and Nissan Automotive.

He was instrumental in leading the re-zoning efforts of Kendall Square and the Volpe Center in Cambridge, to enable mixed-use development and accelerate the process of moving ideas from lab to market. He continues to actively co-lead the development of the process through its complex execution phase, expected to last beyond 2020.

Mr. Ruiz serves on the Board of Directors of edX (an MIT and Harvard online learning initiative), MIT Endicott House, and MIT Technology Review. He chairs the board of The Engine, a new MIT initiative aimed to accelerate breakthrough innovations. He is a director of Fortive (NYSE: FTV) and Moderna Therapeutics. He is also a director of the Governing Board of the Eliot Innovation School and is very active in the Boston Public Schools.

His educational background includes a master's degree from the MIT Sloan School of Management and a six-year degree in industrial and mechanical engineering from the Polytechnic University of Catalonia, in his native Barcelona.

[View full bio](#)

2:40pm

Panel Discussion: Corporate Presence in the Boston Innovation Ecosystem

Scott Kirsner

Editor & Cofounder, [Innovation Leader](#)



Scott Kirsner

Editor & Cofounder

[Innovation Leader](#)

Scott Kirsner is a journalist who writes about innovation and entrepreneurship. His "Innovation Economy" column appears Sundays in the *Boston Globe*, and he is also editor of the site Innovation Leader (www.innovationleader.com), which focuses on R&D, product development, corporate venturing, and new initiatives within large companies. Scott has been a regular contributor to *Fast Company*, *BusinessWeek*, *Variety*, and *Wired*. His books include *Fans, Friends & Followers: Building an Audience and a Creative Career in the Digital Age*, a technological history of Hollywood. He can be reached at scott@innovationleader.com and his Twitter handle is @ScottKirsner.

Hervé Coureil

Executive Vice President and Chief Digital Officer

Member of the Executive Committee, [Schneider Electric SE](#)



Hervé Coureil

Executive Vice President and Chief Digital Officer

Member of the Executive Committee

[Schneider Electric SE](#)

Hervé Coureil joined Schneider Electric in 1993. He is Chief Digital Officer and Member of Executive Committee since 2009.

Prior to assuming this role, Hervé served as Chief Information Officer. He also served as Chief Financial Officer for the Critical Power and Cooling Services (CPCS) Business Unit of Schneider Electric, which was formed in early 2007 following the acquisition of APC Corp. and its merger with MGE-UPS Systems. Hervé's responsibilities included overseeing Legal, IT and Strategy.

In the past, he has held a variety of finance and business development positions with Schneider Electric including Senior Vice President Finance, Control and Business Development for the Asia Pacific Operating Division of Schneider Electric, Vice President Financial Control for the International Division, Corporate Officer for Mergers and Acquisitions, and Financial Controller of various organizations.

Hervé holds a Master in Management from Reims Management School and a Graduado en Ciencias Empresariales Europeas from ICADE in Madrid.

Stas Gayshan

Founder, CIC - Boston

Managing Director, [Cambridge Innovation Center](#)

Stas Gayshan

Founder, CIC - Boston

Managing Director

[Cambridge Innovation Center](#)

Stas Gayshan is Managing Director at the Cambridge Innovation Center (CIC) and the founder of CIC Boston. Stas leads the development of new CIC projects in the Americas, Asia, Australia, the Middle East, and beyond, connecting innovators across boundaries and borders. Stas works with governments, universities, large corporations, real estate developers, entrepreneurs, nonprofits, funders, and other stakeholders to solve difficult problems, build powerful, interwoven innovation ecosystems, and help cities craft lasting, impactful outcomes. A globally sought-after thought leader on innovation and entrepreneurship, Stas is often seen speaking at conferences and judging startup competitions around the world. Stas Gayshan joined CIC in early 2014. Previously, Stas was the Founder & CEO of Space with a Soul, a 20,000 square foot coworking space in Boston's Innovation District. Stas is an entrepreneur and an attorney, and he worked in Democratic political campaigns at various levels prior to starting Space with a Soul. In his political work, Stas focused on the intersection of collaboration, technology and activism. Stas has been

3:20pm

Disruptive Innovation: Picking the Right Axis for Competition

Helen Greiner

Robotic, AI, and Autonomy Expert, [US Army](#)



Helen Greiner

Robotic, AI, and Autonomy Expert

[US Army](#)

Helen Greiner is known for both innovation and business strategy in the field of robotics. Co-founding iRobot in 1990, Greiner served as President until 2004, and Chairman until 2008. During her tenure, Greiner guided iRobot into its position as a global leader with the release of the Roomba™, the PackBot™, and SUGV Military Robots. She built a culture of practical innovation and delivery that led to the deployment of over 6,000 tactical robots with our troops and over 15M home robots worldwide. In addition, Greiner led iRobot's financing efforts, raising \$35M in venture capital for a \$75M initial public offering. Helen Greiner is also the Founder of CyPhy Works, a drone company that delivered aerial platforms to defense and commercial markets. Greiner holds a bachelor's degree in mechanical engineering and a master's degree in computer science, both from MIT. She also holds honorary degrees from Worcester Polytechnic Institute (WPI) and Clarkson University.

Helen will talk about disruptive innovation through the lens of iRobot founder to cover how new technology can attack market by competing on new metrics. Learn to uncover the right axis for creating an innovative product. How does a new and disruptive product beat established leaders? Where should one focus to create a disruptive product?

3:40pm

Closing Remarks

3:45pm

Networking Reception with 1-on-1 Meetings

6:00pm

Adjournment