

MIT Industrial Liaison Program Faculty Knowledgebase Report

2017 MIT Startup Ecosystem Conference

May 3, 2017 8:00 am - 6:00 pm



8:00am

Registration & Continental Breakfast

9:00am

Welcome & Introduction

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.

Trond Undheim

Lead, Startup Exchange

MIT Industrial Liaison Program

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MIT Industrial Liaison Program

Trond heads up the Startup Initiative at MIT's Industrial Liaison Program (ILP), facilitating productive relationships between industry and MIT's startup ecosystem. He is a former Senior Lecturer at the MIT Sloan School of Management. Trond is a serial entrepreneur with Scandinavian roots, and is currently the Founder of Yegii, Inc., the insight network, and Managing Director of Tautec Consulting.

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Marcus Dahllöf

Program Director, [MIT Startup Exchange](#)



9:10am

The Engine: MIT's New Innovation Machine
Anantha Chandrakasan

Dean of Engineering
Vannevar Bush Professor of Electrical Engineering
Department Head / Electrical Engineering and Computer Science (EECS)
MIT Department of Electrical Engineering and Computer Science

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Anantha P. Chandrakasan is dean of MIT's [School of Engineering](#), and the Vannevar Bush Professor of Electrical Engineering and Computer Science.

Read the [News Office announcement \(6/23/2017\)](#) of Chandrakasan's appointment to dean of the School of Engineering.

From July 2011 - July 2017, Chandrakasan was head of the Department of Electrical Engineering and Computer Science (EECS). During his six-year tenure as head of MIT's largest academic department, Chandrakasan spearheaded a number of initiatives that opened opportunities for students, postdocs, and faculty to conduct research, explore entrepreneurial projects, and engage with EECS.

Anantha P. Chandrakasan received the B.S., M.S. and Ph.D. degrees in Electrical Engineering and Computer Sciences from the University of California, Berkeley, in 1989, 1990, and 1994 respectively. Since September 1994, he has been with the Massachusetts Institute of Technology, Cambridge, where he is currently the Vannevar Bush Professor of Electrical Engineering and Computer Science.

Chandrakasan is a recipient of awards including the 2009 Semiconductor Industry Association (SIA) University Researcher Award, the 2013 IEEE Donald O. Pederson Award in Solid-State Circuits, an honorary doctorate from KU Leuven in 2016, and the UC Berkeley EE Distinguished Alumni Award. He was also recognized as the author with the highest number of publications in the 60-year history of the IEEE International Solid-State Circuits Conference (ISSCC), the foremost global forum for presentation of advances in solid-state circuits and systems-on-a-chip. A fellow of IEEE, in 2015 he was elected to the National Academy of Engineering.

Chandrakasan leads the [MIT Energy-Efficient Circuits and Systems Group](#), whose research projects have addressed security hardware, energy harvesting, and wireless charging for the internet of things; energy-efficient circuits and systems for multimedia processing; and platforms for ultra-low-power biomedical electronics.

He is a co-author of *Low Power Digital CMOS Design* (Kluwer Academic Publishers, 1995), *Digital Integrated Circuits* (Pearson Prentice-Hall, 2003, 2nd edition), and *Sub-threshold Design for Ultra-Low Power Systems* (Springer 2006).

Chandrakasan is an IEEE Fellow. He has served in various roles for the IEEE ISSCC including Program Chair, Signal Processing Sub-committee Chair, and Technology Directions Sub-committee Chair. He has been the Conference Chair of ISSCC since 2010. He was the Director of the MIT Microsystems Technology Laboratories from 2006 to 2011. From July 2011 through June 2017, he served as the the Head of the [MIT EECS Department](#). He is currently the dean of MIT's School of Engineering.

[View full bio](#)

9:20am

Startup keynote: Achieving Scale - The Success Story of Dropbox

Akhil Gupta

VP of Engineering, Infrastructure, [Dropbox](#)



Akhil Gupta

VP of Engineering, Infrastructure

[Dropbox](#)

Responsible for an amazingly talented team of 300+ engineers responsible for the backend services that support our services, physical infrastructure (DC, Network, Supply Chain, Hardware), Security (product security, infrastructure security and abuse prevention) and the desktop, mobile and web clients.

These teams are responsible for making sure we deliver reliable and secure services to 500M+ users and also enable product engineering teams to iterate and launch new features.

9:35am

Innovation panel: "DIGITAL—MATERIAL—HYBRID"

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.

Yida Gao

Investor, [New Enterprise Associates \(NEA\)](#)



Yida Gao

Investor

[New Enterprise Associates \(NEA\)](#)

Yida joined NEA in 2015 as an Associate focused on investments in the technology sector. Prior to joining NEA, Yida was a member of the Mergers & Acquisitions Investment Banking team at Morgan Stanley in New York City where he helped execute over \$15Bn in aggregate deal volume. Prior to MS, Yida held research positions at MIT's Sloan School of Management under professor Paul Asquith and at McKinsey & Company in Boston. Topics of research, among others, included landscaping the high tech enterprise verticals to identify pockets of likely consolidation and testing IPO theories using reverse mergers.

Yida graduated Phi Beta Kappa from the Massachusetts Institute of Technology with a B.S. in Mathematics and Computer Science and was a varsity pole vaulter.

Colette Matthews

Global Innovation Director, [Whirlpool](#)



Colette Matthews

Global Innovation Director

[Whirlpool](#)

Colette Matthews, Ph.D. is the Global Innovation Director for Whirlpool Corp. Colette is an experienced marketing and product development professional with over a decade of experience in both the CPG and Durable goods industry. In her current role, Colette oversees all aspects of consumer-centric disruptive innovation, Open Innovation and Trends & Foresight at the world's leading manufacturer of major home appliances.

In her previous role previous roles at Whirlpool, Colette has led both the Connectivity & Smart Home, as well as, Consumer Insights & Strategy teams where she was instrumental in helping shape brand positioning, consumer understanding and build innovation roadmaps within Whirlpool Corporation to drive product and brand leadership.

She kicked off her career at Procter & Gamble with product development roles in both the Global Beauty (China and developing markets) and Health Care business units. Later she accepted a position at Newell Rubbermaid, Beauty & Style Business Unit, where she helped

10:25am

The next generation I: DIGITAL - STEX25 startup thought leaders

Ben Vigoda

Founder & CEO, [Gamalon](#)



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Founder & CEO

[Gamalon](#)

Ben is the CEO and Founder of Gamalon. He was previously the co-founder and CEO of Lyric Semiconductor, the first microprocessor architectures for statistical machine learning, growing out of Ben's PhD at MIT. Lyric was acquired by Analog Devices, and Lyric's technology is deployed in leading smartphones and consumer electronics, medical devices, wireless base stations, and automobiles. He has authored over 120 patents and academic publications, and his work has been featured in the Wall Street Journal, New York Times, EE Times, Scientific American, Wired, TechCrunch, and other media.

Ben has been an Intel Student Fellow, Kavli Foundation/National Academy of Sciences Fellow, served on the DARPA Information Science and Technology (ISAT) steering committee, and has held research appointments at MIT, Hewlett Packard, Mitsubishi, and the Santa Fe Institute. He also co-founded Design That Matters, a not-for-profit that for the past decade has helped solve engineering and design problems in underserved communities and has saved thousands of infant lives by developing low-cost, easy-to-use medical technology such as infant incubators, UV therapy, pulse oximeters, and IV drip systems that have been fielded in 20 countries.

Dan McCall

CEO, Lexumo



Dan McCall

CEO, Lexumo

Dan is a CEO of Lexumo who started his career during the mini-computer boom of the early 80's. He blends a mix of technical, marketing and business savvy and has become a top executive and active board member across a variety of industries including networking, storage, information security and virtualization. He holds a BS, Engineering Computer Science Software/Hardware from the University of Connecticut.

John Andrews

CEO, [Celect](#)



John Andrews

CEO

[Celect](#)

John has spent the last two decades helping retailers, distributors, and brands optimize their omni-channel strategies and operations. Prior to Celect, John was VP of Product Management & Strategy for Oracle Commerce, coming to Oracle via the Endeca acquisition where John was VP of Marketing & Product Management. John started his career within Deloitte Consulting's Strategy & Operations practice. John holds a BA in Economics and Computer Science from Boston College and received his master's degree from the Harvard Business School.

About Celect

Celect is a cloud-based, predictive analytics SaaS platform that helps retailers optimize their overall inventory portfolios in stores and across the supply chain, resulting in double-digit percentage revenue increases. This groundbreaking advance in machine learning and

10:55pm

Networking Break

11:10am

The next generation II: MATERIAL - STEX25 startup thought leaders

Louis Perna

Co-founder, [Accion Systems](#)



Louis Perna

Co-founder

[Accion Systems](#)

Louis Perna is a co-founder of Accion Systems where he focuses on research, testing, product development, and manufacturing. He received his bachelor's and master's degrees from the MIT Department of Aeronautics and Astronautics where he specialized in space propulsion, specifically microsystems design and manufacturing for electrospray thrusters. Louis has supported various NASA centers both academically and professionally where he has investigated operating modes of an ion engine; aided in the design, test, and assembly of planetary exploration robotics systems; and performed program- and vehicle-level technical and programmatic risk estimation for manned spaceflight systems.

Charles Fracchia

Founder & CEO, [BioBright](#)



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Founder & CEO

[BioBright](#)

Charles Fracchia is founder and CEO at BioBright, a company building smart laboratory tools to improve reproducibility in biomedical research. BioBright has been featured in Scientific American, the innovators under 35 in MIT Tech Review, BioIT World, and SLAS. Fracchia did his graduate work between the MIT Media Lab and Harvard Medical School and obtained his BSc from Imperial College London.

Fracchia has presented his work at venues including the White House, MIT Sloan, NASA Ames, IBM Research, Airbus, O'Reilly and SciFoo. Over the years, the work has been sponsored by DARPA, NSF, Alphabet's X (formerly Google X), Knight Foundation, and Templeton Foundation.

Anurag Bajpayee

Co-founder & CEO, [Gradiant Corporation](#)



Anurag Bajpayee

Co-founder & CEO

[Gradiant Corporation](#)

Dr. Anurag Bajpayee is the co-founder and CEO of Gradiant Corporation. Gradiant is a Technology-driven Water Services Company with a suite of proprietary technologies to enable efficient, economical industrial water treatment and recycling currently focused on the oil & gas, mining, and power sectors. Anurag earned his PhD in Mechanical Engineering from MIT where he worked on desalination and water treatment, with a core focus on treatment of oil & gas produced water. His doctoral work on Directional Solvent Extraction (DSE) desalination was recognized by the Scientific American as a top 10 world changing idea and is now part of Gradiant's technology portfolio. Anurag has co-authored 5 peer reviewed journal publications and holds 7 issued or pending patents in the field of water treatment. He earned a BS degree in Mechanical Engineering from the University of Missouri and a Masters degree from MIT.

Keith Hearon

Co-founder & CEO, [Poly6](#)

12:10pm

Lunch & STEX25 Startup Exhibition

MIT Faculty Founder Panel: Fostering deep science & tech entrepreneurship

Trond Undheim
 Lead, Startup Exchange
 MIT Industrial Liaison Program
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Julie Allen
 Partner, Capital Markets and M&A, [Proskauer](#)



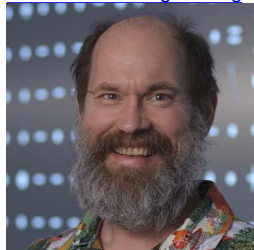
Julie Allen
 Partner, Capital Markets and M&A
[Proskauer](#)

Julie Allen is a partner in the Corporate Department and a co-head of the Capital Markets Group.

Julie's practice focuses on general corporate and securities matters. She represents both underwriters and issuers in initial public offerings and follow-on equity offerings. Her experience also includes Rule 144A debt offerings, both as counsel to issuers and to initial purchasers. Julie's practice also includes mergers and acquisitions, particularly transactions involving public companies. She represents buyers and sellers, activist stockholders, boards of directors and financial advisors in mergers, acquisitions, recapitalizations and tender offers. Julie also regularly counsels public companies and their affiliates regarding disclosure, governance, Sarbanes-Oxley and other securities law and compliance issues.

Julie serves as the Co-Chair of Proskauer's New Business Committee and Chair of its Corporate Department Opinion and Audit Letter Committees.

Alex Slocum
 Director, Precision Engineering Research Group (PERG)
 Walter M. May (1939) and A. Hazel May Chair in Emerging Technologies, [MIT Department of Mechanical Engineering](#)



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 Director, Precision Engineering Research Group (PERG)
 Walter M. May (1939) and A. Hazel May Chair in Emerging Technologies
[MIT Department of Mechanical Engineering](#)

Alexander Slocum is the Walter and Hazel May Professor of Mechanical Engineering at MIT and a member of the US National Academy of Engineering. He has 130+ patents and has helped develop 12 products that have received R&D 100 awards for "one of the one hundred best new technical products of the year". He has helped start several successful precision manufacturing equipment companies and has a passion for working with industry to solve real problems and identify fundamental research topics. For the past decade his prime

The Next Generation III: HYBRID - STEX25 startup thought leaders

David Knezevic
Co-Founder & CTO, [Akselos](#)



David Knezevic
Co-Founder & CTO
[Akselos](#)

Dr. Knezevic, from Perth, Western Australia, is the CTO of Akselos. In this role, he has coordinated the delivery of simulation frameworks to the Power Systems and Mining industries. He holds a Ph.D. from Oxford (Rhodes scholar) and was a post-doc at MIT where he worked on Akselos' core technology. He was a Lecturer at Harvard University for three years before joining Akselos full time.

In 2015 David has represented Akselos at numerous prestigious conferences, like the ASME TurboExpo 2015, and the 'Analysis, Simulation, and Systems Engineering Software Summit (ASSESS)', where he's part of the Initiative Advisory Committee Meeting. He has access to a vast network of leaders and practitioners who play a role in shaping the future of the field.

David is a co-author (with colleagues from MIT) of the patent "Methods and apparatus for constructing and analyzing component-based models of engineering systems" that is one of the foundations of Akselos' technology.

In September 2011, Dr. Knezevic was part of the team that won the largest Deshpande innovation grant at MIT, which led to the launch of Akselos.

Ramiro Almeida
Founder, [Optimus Ride](#)



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[Optimus Ride](#)

Ramiro Almeida has been appointed Professor and Director of The Innovation Lab at MDC. He recently spent three years conducting research at the intersection of innovation, social transformation, technology and entrepreneurship at the MIT Media Lab. Prior to his appointment at MIT, he was a Fellow at Harvard University. He was awarded the prestigious Loeb Fellowship at the Graduate School of Design. During his tenure he published the book *A Line in The Andes*, as part of a research studio that aimed at detailing the potential for urban design solutions required to meet the transportation challenges in developing a city's first subway line. As an entrepreneur, he invested in early stage startups including the publication of the first Spanish version of Wired magazine in 1999, where he was first exposed to disruptive technologies. He later invested in Libri Mundi in 2006, the most prestigious bookstore and publishing company in Ecuador, which was acquired by La Favorita, the largest retail corporation in the country. As part of an alternative creative process, he explores publishing and film production. During his residence at the Harvard Innovation Lab in 2013, Mr. Almeida started the project to produce a feature animation film about technology, life and evolution. With MIT colleagues, he is working on designing self driving vehicle systems.

Jon Garrity
Founder & CEO, [Tagup](#)



Jon Garrity
Founder & CEO
[Tagup](#)

3:30pm

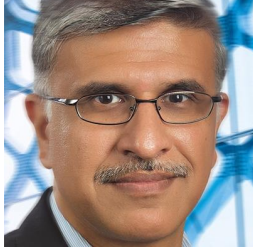
Networking Break

3:45pm

The changing landscape of automotive technology innovation, and the various influences shaping it

Swamy Kotagiri

Chief Technology Officer, [Magna International](#)



Swamy Kotagiri

Chief Technology Officer

[Magna International](#)

Swamy Kotagiri was named Chief Technology Officer of Magna International in January 2014. In this role, Kotagiri is globally responsible for managing all aspects of the company's innovation and new product strategy and development, at a corporate level as well as in conjunction with Magna's operating units. In early 2013, Swamy was appointed as Executive Vice President of corporate engineering and research & development functions.

Kotagiri has more than 22 years of industry experience and previously served in various engineering leadership positions at Cosma International, a Magna operating unit. He was responsible for innovation strategy development as well as the launch and execution of new technologies in Cosma's manufacturing divisions while serving as Executive Vice President of global engineering and R&D starting in 2008 and Director of R&D prior to that.

Before joining Cosma, Kotagiri was a structural engineer at General Motors.

Kotagiri has a Master's Degree in mechanical engineering from Oklahoma State University with a specialization in materials and structural engineering. He has more than 12 patents to his credit in automotive product and process design, and has memberships with the Society of Automotive Engineers and the Engineering Society of Detroit.

Innovation panel: "DIGITAL—MATERIAL—HYBRID:"

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Jinane Abounadi

Executive Director, MIT Sandbox Innovation Fund Program



Jinane Abounadi

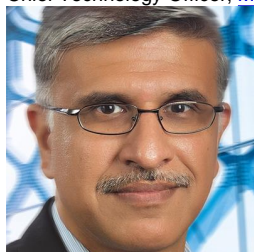
Executive Director, MIT Sandbox Innovation Fund Program

Jinane Abounadi is Executive Director of the MIT Sandbox Innovation Fund Program. She brings a unique combination of experiences, from academic research to senior operational and strategic roles in start-up companies and large businesses. After completing her graduate work, she worked as a research scientist at BBN and as a postdoctoral lecturer at MIT, and advised undergraduate and graduate students. She held leadership roles in two of the most successful local Boston area start-ups, ITA Software and Kayak, where she gained deep knowledge about the travel technology sector. Most recently, she ran a global portfolio of 3rd party products for Travelport, giving her the opportunity to establish partnerships with companies across the globe and to advise and evaluate a number of start-ups in the travel sector.

Abounadi earned her PhD in electrical engineering and computer science at MIT, a BS in electrical engineering from Caltech, and a BA from Bryn Mawr College. She has several publications in the fields of machine learning and communication networks and is passionate about teaching and working with college students. As a long-time housemaster at MIT, she has gained extensive experience in student life. She lives in Cambridge with her husband and three children. Outside of her professional life, she volunteers at her children's schools. She served on the Board of trustees of Shady Hill School for six years, served on the founding school committee of the Center of Arabic Culture, and spends her free time cheering and supporting her children's sports team.

[View full bio](#)

Swamy Kotagiri
Chief Technology Officer, [Magna International](#)



Swamy Kotagiri
Chief Technology Officer
[Magna International](#)

4:30pm Mobile experiments at the intersection of content and technology?
Ashley Miller
Senior Software Engineering Manager, [BuzzFeed](#)

5:00pm Networking Reception