2022 MIT Efficient AI and Computing Technologies Conference

May 5, 2022 8:00 am - 6:00 pm

8:00 AM - 9:00 AM	Registration with Light Breakfast
9:00 AM - 9:15 AM	Welcome Remarks: MIT Corporate Relations Overview

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.

Irina Sigalovsky
Director, MIT Corporate Relations

Irina Sigalovsky
Director, MIT Corporate Relations

Irina Sigalovsky is Director of MIT Corporate Relations where she builds mutually beneficial partnerships between corporations and MIT.

Dr. Sigalovsky comes to MIT with 10 years of international experience in innovation strategy, technology forecasting and external innovation. Prior to MIT, Irina worked at GEN3 Partners, Inc. as a senior principal collaborating with Fortune 1000 companies to focus their innovation investments, execute strategic innovation agendas, and develop business globally. Throughout her career, Irina has taught at Tufts University, MIT Sloan, X-Prize Lab@MIT, MIT HST, Boston and Harvard Universities.

Irina earned her B.S. degree in Biomedical Engineering from Boston University and her Ph.D. in Neuroscience from the MIT/Harvard Medical School Division of Health Sciences and Technology (HST).

9:15 AM - 9:45 AM   Building the Schwarzman College of Computing at MIT
                         Daniel Huttenlocher
                         Dean, MIT Stephen A. Schwarzman College of Computing
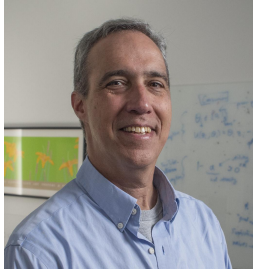
Daniel Huttenlocher
Dean
MIT Stephen A. Schwarzman College of Computing

Daniel Huttenlocher is the inaugural dean of the MIT Stephen A. Schwarzman College of Computing. He began his academic career at Cornell University in 1988, where he was a member of the computer science faculty. In 1998, he chaired the task force that led to the creation of Cornell's interdisciplinary Faculty of Computing and Information Science, later serving as its dean starting in 2009. In 2012, he became the founding dean of the new Cornell Tech campus in New York City.

Huttenlocher has extensive industry experience, having served as a scientist and lab director at Xerox's Palo Alto Research Center for 12 years before leaving to help establish a financial technology startup, Intelligent Markets, in 2000.

Huttenlocher's research and scholarship in computer science is broad and interdisciplinary, spanning algorithms, social media, and computer vision. He has earned the Longuet-Higgins Award for Fundamental Advances in Computer Vision (2010), and various fellowships and awards from the National Science Foundation, the Association for Computing Machinery, IEEE, and Phi Beta Kappa.

He is a member of the boards of directors of Amazon and Corning, and of the John D. and Catherine T. MacArthur Foundation, where he has served as chair since 2018.

Huttenlocher earned a bachelor's degree from the University of Michigan in 1980, double-majoring in computer and communication sciences and experimental psychology. An MIT alumnus, he earned an SM in electrical engineering and computer science in 1984 and a PhD in computer science in 1988.

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The MIT Stephen A. Schwarzman College of Computing was founded to lead the transformation of education and research in this time of rapid advances in computing and its increasing influence on so many aspects of daily life. Launched in 2019, the College represents the first major structural change at MIT in three-quarters of a century. The mission of the College is three-fold: to support the rapid growth and evolution of computer science, artificial intelligence and related computing fields; facilitate collaborations in computing education and research across departments and disciplines; and focus on social and ethical responsibilities of computing. Together, these are critically important in meeting the opportunities and challenges posed by today's and tomorrow's computing technologies.

9:45 AM - 10:15 AM   Learning to See by Looking at Noise
Antonio Torralba
Thomas and Gerd Perkins Professor of Electrical Engineering and Computer Science
Head AI+D (AI & Decision Making) faculty, EECS
Computer Science and Artificial Intelligence Laboratory

Antonio Torralba
Thomas and Gerd Perkins Professor of Electrical Engineering and Computer Science
Head AI+D (AI & Decision Making) faculty, EECS
Computer Science and Artificial Intelligence Laboratory

Antonio Torralba is the Thomas and Gerd Perkins Professor of Electrical Engineering and Computer Science at MIT. He also heads the faculty of artificial intelligence and decision-making in the MIT Schwarzman College of Computing. Previously, he led the MIT Quest for Intelligence as its inaugural director and the MIT–IBM Watson AI Lab as its MIT director. He researches computer vision, machine learning and human visual perception, with an interest in building systems that can perceive the world as humans do. He has received an NSF Career Award, the International Association for Pattern Recognition's JK Aggarwal Prize, a Frank Quick Faculty Research Innovation Fellowship and a Louis D. Smullin ('39) Award for Teaching Excellence. Torralba earned a BS from Telecom BCN, Spain, and a PhD from the Institut National Polytechnique de Grenoble, France.

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The importance of data in modern computer vision is hard to overstate. The ImageNet dataset, with its millions of labelled images, is widely thought to have spurred the era of deep learning, and since then the scale of vision datasets has been increasing at a rapid pace. These datasets come with costs: curation is expensive, and they inherit human biases. To counter these costs, interest has surged in learning with unlabeled images as it avoids the curation efforts, or using simulated environments, but content creation is also labor intensive. In our work we go a step further and ask if we can do away with real image datasets entirely, instead learning from noise processes. Noise processes produce images that are reminiscent of abstract art, where images contain textures and shapes, but there are no recognizable objects. Our findings show that good performance on real images can be achieved even with training images that are far from realistic.

10:15 AM - 10:45 AM	Efficient ML by Approximation
	Michael Carbin
	Assistant Professor, Department of Electrical Engineering and Computer Science
	Lead, Programming Systems Group
	Michael Carbin
	Assistant Professor, Department of Electrical Engineering and Computer Science
	Lead, Programming Systems Group

Michael Carbin is an assistant professor in MIT's Department of Electrical Engineering and Computer Science and a principal investigator at the Computer Science and Artificial Intelligence Laboratory, where he leads the Programming Systems Group. His group investigates the semantics, design, and implementation of systems that operate in the presence of uncertainty in their environment (perception), implementation (neural networks or approximate transformations), or execution (unreliable hardware). Carbin has received a Sloan Research Fellowship, a Facebook Research Award, a Google Faculty Research Award and an NSF Career Award. He earned a BS in computer science from Stanford University, and an MS and PhD in electrical engineering and computer science from MIT.

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The cost of training modern deep learning systems, such as GPT-3, has put the impressive capabilities of these systems beyond the reach of many individuals and institutions. However, a key property of these systems is that they are approximate in that there is a natural trade-off between the quality of the results these systems produce and their performance and energy consumption. Exploiting this fact, researchers have developed a variety of new mechanisms that automatically change the exact behavior of a system to enable the system to execute more efficiently and cost effectively through techniques like quantization, distillation, and pruning. In this talk, I will present how such approximation mechanisms serve as a central opportunity for efficient ML, with still critical work to be done in understanding how to compose, analyze, and characterize the behavior of the resulting approximate systems.

10:45 AM - 11:05 AM	Networking Break

11:05 AM - 11:35 AM   Chips for Robotics: The Co-design of Computing Hardware and Algorithms for Low-energy
                             Autonomous Vehicles
                             Sertac Karaman
                             Associate Professor of Aeronautics and Astronautics at the Massachusetts Institute of
                             Technology
                             Director, Laboratory for Information and Decision Systems (LIDS)

Sertac Karaman
Associate Professor of Aeronautics and Astronautics at the Massachusetts Institute of
Technology
Director
Laboratory for Information and Decision Systems (LIDS)

Sertac Karaman is the director of the Laboratory for Information and Decision Systems, and
an associate professor of Aeronautics and Astronautics at MIT. His research areas are
robotics and control theory, particularly the applications of probability theory, stochastic
processes, stochastic geometry, formal methods, and optimization for the design and
analysis of high-performance cyber-physical systems. The applications of this research
include driverless cars, unmanned aerial vehicles, distributed aerial surveillance systems, air
traffic control, and certification and verification of control systems software. Karaman
received a PhD in electrical engineering and computer science and an SM in mechanical
engineering from MIT and BS degrees in mechanical engineering and in computer
engineering from the Istanbul Technical University.

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A broad range of next-generation mobile robotics applications will be enabled by low-energy
sensing and computing, in particular, by miniaturization. Specifically, we envision (i) insect-
size drones for consumer applications, (ii) pill-size medical robots that can intelligently
navigate the human digestive system, (iii) intelligent satellites on chip that can navigate far
corners of the Solar system, (iv) low-energy glider drones and underwater vehicles that can
operate continuously for months to monitor our planet towards a sustainable future. These
applications and many more will be enabled by low-energy sensing, computation and
actuation, and in some cases their miniaturization.

11:35 AM - 12:05 PM   Ambient Intelligence: Seeing the World Through the Eyes of Radio Signals
                           Dina Katabi
                           Thuan and Nicole Pham Professor
                           MacArthur Fellow
                           Leader of NETMIT Research Group
                           Director of the MIT Center for Wireless Networks and Mobile Computing

Dina Katabi
Thuan and Nicole Pham Professor
MacArthur Fellow
Leader of NETMIT Research Group
Director of the MIT Center for Wireless Networks and Mobile Computing

Dina Katabi is the Thuan and Nicole Pham Professor of Electrical Engineering and
Computer Science, and the director of MIT's Center for Wireless Networks and Mobile
Computing (Wireless@MIT). Katabi is also a MacArthur Fellow and a Member of the
National Academy of Engineering. She received her PhD and MS from MIT and her BS from
Damascus University. Katabi has received the ACM Grace Murray Hopper Award, the
Faculty Research Innovation Fellowship, the Sloan Fellowship, the NBX Career
Development chair, and the NSF CAREER award. Katabi's doctoral dissertation won an
ACM Honorable Mention award and a Sprowls award for academic excellence. Further, her
work was recognized by the IEEE William R. Bennett prize, three ACM SIGCOMM Best
Paper awards, an NSDI Best Paper award, the SIGCOMM Test-of-Time award, and a TR10
award for her work on the sparse Fourier transform. Several start-ups have been spun out of
Katabi's lab, such as PiCharging and Emerald.

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Ambient intelligence is the ability of observing people and their actions even when they are
separated from the observer by walls and occlusions, capturing their physiological signals
without putting sensors on their bodies, understanding their emotions even when they do not
show on their faces, and detecting specific neuro-behavioral diseases before they are
clinically diagnosed. We argue that all this information is encoded in radio waves that
bounce off people's bodies, and hence can be captured in a passive and touchless manner.
This talk will describe new technologies and machine learning models that analyze radio
signals using specialized neural networks to decode and interpret this information, including
the systems foundations that allow us to take such technologies from a lab setting to the real-
world. The proposed research fundamentally changes what is feasible today and expands
our understanding of how to sense and interact with people and objects without physical
contact.

12:05 PM - 12:55 PM   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.

Jeffrey Chou
Co-founder & CEO
Sync Computing

Mike Fleder
Founder & CEO
Covariance

Henry Valk
Data Scientist
Pison

Daisy Zhuo
Co-founder
Interpretable AI

Elaheh Ahmadi
Co-founder & CEO
Themis AI

Sebastian Bauer
Co-founder & CEO
UbiCept

Andy Wang
Founder & CEO
Prescient

Julie Choi
Chief Growth Officer
MosaicML

Di Wu
CEO and Co-founder
OmniML

Mark Tibbetts
Product and Data Science Lead
Arundo

12:55 PM - 2:00 PM	Lunch with Startup Exhibit

Sync Computing | **Covariance** | **Pison** | **Interpretable AI** | **Themis AI** | **UbiCept**

Prescient | **MosaicML** | **OmniML** | **Arundo**

Startups at Lunch Exhibit Only

- **Leela AI:** Resilient AI Solving Real-World Problems

- **ServiceMob:** Ontology Based Analytics Cross Industry for Service/Support Centers
- **Modzy:** ModelOps Platform for AI at Scale
- **Pathr:** You Can Learn a lot from a Dot

2:00 PM - 2:15 PM	AI Hardware: What's Next? Jesús A. del Alamo

Donner Professor, MIT Department of Electrical Engineering and Computer Science (EECS)

Jesús A. del Alamo

Donner Professor, MIT Department of Electrical Engineering and Computer Science (EECS)

Jesus A. del Alamo is the Donner Professor and Professor of Electrical Engineering at Massachusetts Institute of Technology. He obtained a Telecommunications Engineer degree from the Polytechnic University of Madrid and MS and PhD degrees in Electrical Engineering from Stanford University. From 1985 to 1988 he was with Nippon Telegraph and Telephone LSI Laboratories in Japan and since 1988 he has been with the Department of Electrical Engineering and Computer Science of Massachusetts Institute of Technology. From 2013 until 2019, he served as Director of the Microsystems Technology Laboratories at MIT. His current research interests are focused on nanoelectronics based on compound semiconductors and ultra-wide bandgap semiconductors.

Prof. del Alamo was an NSF Presidential Young Investigator. He is a member of the Royal Spanish Academy of Engineering and Fellow of the Institute of Electrical and Electronics Engineers, the American Physical Society and the Materials Research Society. He is the recipient of the Intel Outstanding Researcher Award in Emerging Research Devices, the Semiconductor Research Corporation Technical Excellence Award, the IEEE Electron Devices Society Education Award, the University Researcher Award by Semiconductor Industry Association and Semiconductor Research Corporation, the IPRM Award and the IEEE Cledo Brunetti Award. He currently serves as Editor-in-Chief of IEEE Electron Device Letters. He is the author of "Integrated Microelectronic Devices: Physics and Modeling" (Pearson 2017, 880 pages), a rigorous and up to date description of transistors and other contemporary microelectronic devices.

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Advances in hardware performance thanks to Moore's Law and chip architectural innovations constitute one of the pillars on top of which the recent roaring progress in artificial intelligence applications has been built. Future gains in AI capabilities hinge on continuous hardware advances. With core CMOS technology evolution on a path of diminishing returns, new architectural innovations, new system and circuit paradigms and new devices and materials that operate on new physical principles are going to be required. Innovation up and down the abstraction stack is mandatory. This creates wonderful opportunities for engineers and scientists of all disciplines and operating at all levels to propel the next wave of the electronics revolution.
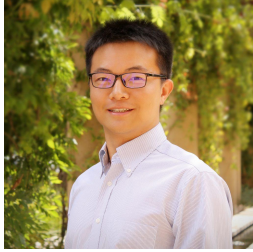
2:15 PM - 2:45 PM   TinyML: Enable Efficient Deep Learning on Mobile Devices
Song Han
Assistant Professor, Department of Electrical Engineering and Computer Science, MIT EECS

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Assistant Professor, Department of Electrical Engineering and Computer Science
MIT EECS

Song Han is an assistant professor in MIT's Department of Electrical Engineering and
Computer Science. His research focuses on efficient deep learning computing. He has
proposed "deep compression" as a way to reduce neural network size by an order of
magnitude, and the hardware implementation "efficient inference engine" that first exploited
model compression and weight sparsity in deep learning accelerators. He has received best
paper awards at the International Conference on Learning Representations and Field-
Programmable Gate Arrays symposium. He is also a recipient of an NSF Career Award and
MIT Tech Review's 35 Innovators Under 35 award. Many of his pruning, compression, and
acceleration techniques have been integrated into commercial artificial intelligence chips. He
earned a PhD in electrical engineering from Stanford University.

Modern deep learning requires a massive amount of computational resources, carbon
footprint, and engineering efforts. On mobile devices, the hardware resource and power
budget are very limited, and on-device machine learning is challenging; retraining the model
on-device is even more difficult. We make machine learning efficient and fit tiny devices
(TinyML). Our research is highlighted by full-stack optimizations, including the neural
network topology, inference library, and the hardware architecture, which allows a larger
design space to unearth the underlying principles.

2:45 PM - 3:30 PM   MIT-Industry Panel Discussion: AI Hardware at the Edge - the Internet of Intelligent Things
Jesús A. del Alamo

Donner Professor, MIT Department of Electrical Engineering and Computer Science (EECS)

Jesús A. del Alamo

Donner Professor, MIT Department of Electrical Engineering and Computer Science (EECS)
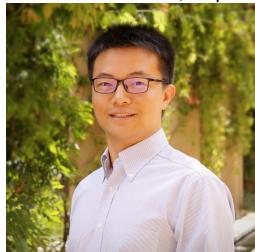
Jesus A. del Alamo is the Donner Professor and Professor of Electrical Engineering at Massachusetts Institute of Technology. He obtained a Telecommunications Engineer degree from the Polytechnic University of Madrid and MS and PhD degrees in Electrical Engineering from Stanford University. From 1985 to 1988 he was with Nippon Telegraph and Telephone LSI Laboratories in Japan and since 1988 he has been with the Department of Electrical Engineering and Computer Science of Massachusetts Institute of Technology. From 2013 until 2019, he served as Director of the Microsystems Technology Laboratories at MIT. His current research interests are focused on nanoelectronics based on compound semiconductors and ultra-wide bandgap semiconductors.

Prof. del Alamo was an NSF Presidential Young Investigator. He is a member of the Royal Spanish Academy of Engineering and Fellow of the Institute of Electrical and Electronics Engineers, the American Physical Society and the Materials Research Society. He is the recipient of the Intel Outstanding Researcher Award in Emerging Research Devices, the Semiconductor Research Corporation Technical Excellence Award, the IEEE Electron Devices Society Education Award, the University Researcher Award by Semiconductor Industry Association and Semiconductor Research Corporation, the IPRM Award and the IEEE Cledo Brunetti Award. He currently serves as Editor-in-Chief of IEEE Electron Device Letters. He is the author of "Integrated Microelectronic Devices: Physics and Modeling" (Pearson 2017, 880 pages), a rigorous and up to date description of transistors and other contemporary microelectronic devices.

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Joel Emer
Professor of the Practice
Department of Electrical Engineering and Computer Science
MIT CSAIL

Song Han
Assistant Professor, Department of Electrical Engineering and Computer Science, MIT EECS

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Assistant Professor, Department of Electrical Engineering and Computer Science
MIT EECS

Song Han is an assistant professor in MIT's Department of Electrical Engineering and Computer Science. His research focuses on efficient deep learning computing. He has proposed "deep compression" as a way to reduce neural network size by an order of magnitude, and the hardware implementation "efficient inference engine" that first exploited model compression and weight sparsity in deep learning accelerators. He has received best paper awards at the International Conference on Learning Representations and Field-Programmable Gate Arrays symposium. He is also a recipient of an NSF Career Award and MIT Tech Review's 35 Innovators Under 35 award. Many of his pruning, compression, and acceleration techniques have been integrated into commercial artificial intelligence chips. He earned a PhD in electrical engineering from Stanford University.

Rajesh Pankaj
Senior Vice President of Engineering
Head of the Corporate Research and Development (CR&D)
Qualcomm Technologies

Varada Gopalakrishnan
VP/Distinguished Engineer, Amazon Devices

3:30 PM - 3:50 PM   Networking Break

3:50 PM - 4:20 PM   High-resolution Tactile Sensors to Give AI a Human-Touch
Wojciech Matusik
Professor, Electrical Engineering and Computer Science , [MIT Computer Science and Artificial Intelligence Laboratory](#)

Wojciech Matusik
Professor, Electrical Engineering and Computer Science
[MIT Computer Science and Artificial Intelligence Laboratory](#)

Wojciech Matusik is a professor in MIT's Department of Electrical Engineering and Computer Science, and leads the Computational Fabrication Group at the Computer Science and Artificial Intelligence Laboratory. His research interests are in computer graphics, computational design and fabrication, computer vision, robotics and human-computer interaction. Before coming to MIT, he worked at Mitsubishi Electric Research Laboratories, Adobe Systems and Disney Research Zurich. He has received a Ruth and Joel Spira Award for Excellence in Teaching, a DARPA Young Faculty Award and a Sloan Foundation fellowship. He has been named one of the world's top 100 young innovators by MIT Technology Review and received a Significant New Researcher Award from ACM Siggraph. He earned a PhD in computer graphics at MIT.

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We are developing scalable, high-resolution, conformal tactile sensor arrays that can be automatically manufactured with inexpensive materials. Obtaining synchronized data from different sensing modalities enables an efficient learning system of humans and the environment that does not require extensive labeled data. The developed prototypes allow us to record synchronized vision and tactile data from various human activities and human-object interactions. This can significantly facilitate the development of self-supervised learning systems and build models that can sense the environment like a human.

4:20 PM - 4:50 PM

The 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 human-robot 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.

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The Ethical Computing Protocol is an original project from the Social and Ethical Responsibility of Computing cross-cutting unit in the MIT College of Computing. The on-line platform is designed to help people identify, address, and communicate about the ethical dimensions of their AI and computing projects, including societal and environmental impacts of their work. The platform allows to develop a richer picture of the outcome of a project, how it affects people and how to conceptualize, design, build, and deploy a project aligned with positive societal benefits. The project allows to create an Ethical Impact Report, a document that reflects the work put into the protocol process and the decisions made as a result.

| 4:50 PM - 5:05 PM | AI Talent Recruiting: MIT EECS Alliance |
| | Tomás Palacios |

Director, MIT Microsystems Technology Laboratories (MTL)
Professor, MIT Department of Electrical Engineering and Computer Science (EECS)
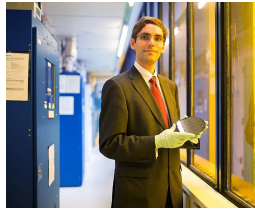
Tomás Palacios

Director, MIT Microsystems Technology Laboratories (MTL)
Professor, MIT Department of Electrical Engineering and Computer Science (EECS)

Tomás Palacios is the Director of Microsystems Technology Laboratories (MTL) and is a Professor in the Department of Electrical Engineering and Computer Science at the Massachusetts Institute of Technology. He received his Ph.D. from the University of California - Santa Barbara in 2006 and his undergraduate degree in Telecommunication Engineering from the Universidad Politécnica de Madrid (Spain). Being a fellow of IEEE his current research focuses on demonstrating new electronic devices and applications for novel semiconductor materials such as graphene and gallium nitride. Tomás is passionate about making an impact on modern society in Energy, Engineering, Nanoscale, Physics, Semiconductors, Nanotechnology, and Climate Change. His work has been recognized with multiple awards, including the Presidential Early Career Award for Scientists and Engineers, the 2012 and 2019 IEEE George Smith Awards, and the NSF, ONR, and DARPA Young Faculty Awards, among many others. Prof. Palacios is the founder and director of the MIT MTL Center for Graphene Devices and 2D Systems, as well as the Chief Advisor and co-founder of Finwave Semiconductor, Inc. From 2023, Tomas serves as Associate Director of the SUPeRior Energy-efficient Materials and Devices (SUPREME) center, one of the seven 2023 JUMP 2.0 programs sponsored by Semiconductor Research Corporation.

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5:05 PM - 6:00 PM	Adjournment with Networking Reception
	Irina Sigalovsky
	Director, MIT Corporate Relations

Irina Sigalovsky
Director, MIT Corporate Relations

Irina Sigalovsky is Director of MIT Corporate Relations where she builds mutually beneficial partnerships between corporations and MIT.

Dr. Sigalovsky comes to MIT with 10 years of international experience in innovation strategy, technology forecasting and external innovation. Prior to MIT, Irina worked at GEN3 Partners, Inc. as a senior principal collaborating with Fortune 1000 companies to focus their innovation investments, execute strategic innovation agendas, and develop business globally. Throughout her career, Irina has taught at Tufts University, MIT Sloan, X-Prize Lab@MIT, MIT HST, Boston and Harvard Universities.

Irina earned her B.S. degree in Biomedical Engineering from Boston University and her Ph.D. in Neuroscience from the MIT/Harvard Medical School Division of Health Sciences and Technology (HST).