

# Workshop on innovative startups and entrepreneurship

19 September 2024

2:00 pm – 6:30pm

## Objective

In this special workshop the future technological directions and application trends, the support offered by a scientific and professional association like IEEE, the ethics of technology, the role of university incubators/accelerators, European Programs to support innovative startups, venture capital strategies, patents and IPR protections, entrepreneurship education and an example of S&YP initiative for young entrepreneurs are presented.

Finally, a round table among all actors will answer questions from the moderator and the audience. The workshop, organized during IEEE RTSI 2024 (<https://2024.ieee-rtsi.org/>) will be open to remote participation.

## Program

14:00 – 14:10 Welcome to participants

Tiziana Tambosso – IEEE [Italy Section Entrepreneurship Committee](#)

Marios Antoniou – IEEE R8 VC-TA

14:10- 14:30 **Christine Miyachi** (Software Engineering Manager @Microsoft, IEEE Future Direction Committee chair)

*How can IEEE future directions help your start up?*

14:30-14:45 **Joanne Wong** (General Partner of [REDD Capital](#) and [IEEE Entrepreneurship](#) chair)

*IEEE Entrepreneurship - at the forefront of turning ideas into successful businesses*

14:45 – 15:00 **Rawan el-Jamal** (Mastercard Europe and IEEE [R8 Entrepreneurship Committee](#) Chair)

*IEEE R8 programs to support entrepreneurs*

15:00- 15:20 **Ali Hessami** (Vega Systems Director and IEEE [P7000 standard](#) Chair)

*Ethical Artificial Intelligence: impact of ethics in development and adoption of AI technologies*

15:20 – 15:40 **Enrico Deluchi** (Entrepreneur/startup Advisor/Business Angel)

*From Invention to Innovation: how to create a startup transforming great technologies into real products*

15:40 – 16:00 **Roberto della Marina** (Founder and Managing Partner of [Obloo Ventures](#) and [Venture Factory](#))

*Venture Capital for early stage Deep tech companies*

16:00- 16:30 COFFEE BREAK

16:30 – 16:45 **Alessia Rotolo** ([APRE](#)- Agency for the Promotion of the European Research)  
*EIC Accelerator: state of the art and a look to the future*

16:45 – 17:00 **Anna De Stefano** (Angel Investor & Startup Advisor | Legal Design Expert)  
*Intellectual property and legal design for innovative startups*

17:00 – 17:15 **Ruggero Frezza** (President of [M31](#))  
*Fostering innovation through universities in Italy, is there a role for catalysts?*

17:15-17:30 **Alexandra Dumitrache** ([Entrepreneurship Club Polimi](#))  
*Students and entrepreneurship – the Polimi experience*

17:30 – 18:30 Q&A & Round Table – Moderator: *Tiziana Tambosso*

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## APPENDIX – abstracts- and short CVs of the speakers

### Christine Miyachi



**Title:** *How can IEEE future directions help your start up?*

#### **Abstract**

Want to predict the future? Future Directions works with C-suite executives across the globe to predict new technologies that are the most important in the coming year and also in the farther future (we call those “Megatrends”). The Industry Advisory Board releases a report every year. In addition, Future Directions forms Initiatives to bring the latest technologies to the IEEE.

In this talk, Chris Miyachi, the chair of IEEE Future Directions, will present what the Future Direction Committee sees for the future and what we are working on this year. As an IEEE member, learn how to get what you need for your start up idea with Future Directions.

#### **Short Biography**

Christine has almost 30 years of experience working for startups and large corporations. Currently she is a Senior Software Engineering Manager in the Cloud+AI division at Microsoft. She holds two MIT degrees: an MS in technology and policy/electrical engineering and computer science and an MS in engineering and management. See more about Chris at [www.christinemiyachi.com](http://www.christinemiyachi.com)

## Joanne Wong



**Title:** *IEEE Entrepreneurship - at the forefront of turning ideas into successful businesses*

### Abstract

IEEE Entrepreneurship works with multiple players in the global startup and investor ecosystem. Consequently, IEEE Entrepreneurship helps IEEE societies and regions from around the world connect to various resources that would help IEEE members' startups go to the next level. IEEE Entrepreneurship programs vary with respect to the IEEE region as each geography has different startup support systems. IEEE Entrepreneurship looks to complement and not replicate existing startup programs in each region. IEEE Entrepreneurship would like to hear from you as to how we can best support your ideas and research transform into business success.

### Short Biography

Joanne is the Chair of [IEEE Entrepreneurship](#) (2022 to 2024), Connecting tech entrepreneurs to an engineering-driven global Innovation network. IEEE Entrepreneurship is developing and providing startup resources for academic researchers and tech entrepreneurs.

She was Member at Large (2021) and was Vice Chair, Industry & Investor Activities (2020) of IEEE Entrepreneurship. She was Secretary, [IEEE TEMS](#) Executive Committee and Board of Governors (2019 to 2021).

Joanne is General Partner of [REDDS Capital](#), a Californian based VC firm investing in global early-stage IT startups. She has worked with IBM, HP, SAP, and Cisco in multiple technical, market development, and strategic investments positions.

Joanne was the Executive Director of a healthcare charity start-up, providing free green access to high performance computational resources for biomedical researchers. She was a co-founder of a startup that provided educators the use of 3D simulation for learning. She was also a startup co-founder with researchers that provided researchers a multi-modal research data management platform for longitudinal clinical studies.

She is a mentor/advisor for multiple startups and not for profits. Joanne has served on several boards including the Government of Canada ICT sector council setting research and advising ICT policy for the country.

<https://www.linkedin.com/in/joannewongreddscapital>

## Rawan El Jamal



**Title:** *IEEE R8 programs to support entrepreneurships*

### **Abstract**

The session will focus on IEEE programs in Region 8 supporting entrepreneurship and how members can get involved, as volunteers or aspiring entrepreneurs. We will leave room at the end of the session for Q&A and input from attendees on their needs regarding IEEE support for entrepreneurship.

### **Short Biography**

Rawan is the chairperson for IEEE Region 8 Entrepreneurship Committee and a Steering Committee Member of IEEE Entrepreneurship. She has been an IEEE volunteer since 2014, focusing on student activities, young professionals, and now driving the entrepreneurship community within IEEE, as well as external partnerships. Outside IEEE, Rawan is currently part of Mastercard Europe, working on solution architecture for Digital Partners and Fintechs, and now leading Global Digital Country Partnerships. Prior to Mastercard, Rawan led strategy and management consulting projects in the Middle East with the Boston Consulting Group. Rawan holds a BE in Computer Engineering from the American University of Beirut and a Masters in Business Administration from London Business School.

## Ali Hessami



**Title:** *Ethical Artificial Intelligence: impact of ethics in development and adoption of AI technologies*

### Abstract

This talk will cover the advances on technology ethics and two IEEE initiatives namely IEEE 7000 suite of standards and the Ethics Certification Programme for Autonomous and Intelligent Systems (ECPAIS). The ECPAIS suites of SMART technology ethics criteria comprise Accountability, Transparency, Algorithmic Bias, Privacy, Fairness and Responsible Governance. These provide a basis for raising awareness and offer a comprehensive systematic framework for the innovators, researchers and technologists as well as small and large, public and private enterprises involved in AI and autonomous technology innovation, development, service provision and deployment. The main focus is on Autonomous Decision Making and Algorithmic Learning Systems, the emerging regulatory landscape. The latest societal context for the potential benefits and harms from AI systems will be explored culminating in presenting the IEEE developed ecosystem for evaluation, assessment and certification of such systems (CertifAIEd) for optimal societal balance and benefit.

### Short Biography

**PROF. ALI HESSAMI, FRSA**  
**PHD, BSc (HONS), EURING, CENG, FIET, SMIEEE**  
<https://www.linkedin.com/in/ali-hessami-84557111/>

Ali is currently the Director of R&D and Innovation at Vega Systems with extensive track record in systems assurance and safety, security, sustainability, knowledge assessment/management methodologies and has a background in design and development of advanced control systems for business and safety critical industrial applications.

Ali is a UK expert on CENELEC & IEC safety/security systems, hardware & software standards committees. Ali also a member of CENELEC WG26 Group and IEC PT63452 Cyber Security

Standardisation. A past Section chair in the UK and Ireland section of IEEE and chaired the Humanitarian Technologies (SIGHT) group and Systems Council Chapter in the section.

During 2017 Ali was appointed as the Technical Editor and later the Chair of new landmark IEEE 7000 standard focused on “Addressing Ethical Concerns in System Design” to its publication in 2021. In November 2018, he was appointed as the Vice Chair and Process Architect of the IEEE ‘s global Ethics Certification Programme for Autonomous & Intelligent Systems (ECPAIS). This is now a global programme under IEEE CertifAIEd brand for criteria development, evaluation, conformity assessment and certification of products, systems and services hinged around AI technologies. Ali is a Visiting Professor at London City University’s Centre for Systems and Control and at Beijing Jiaotong University School of Electronics & Information Engineering. He is also a Fellow of Royal Society of Arts (FRSA), Fellow of the UK Institution of Engineering & Technology (IET) and a Life Senior Member of IEEE.

## Enrico Deluchi



**Title:** *From Invention to Innovation: how to create a startup transforming great technologies into real products*

### Abstract

Most people think having a great idea is the most important ingredient to create a new startup and being successful. In reality ***the idea***, being it a new technology or a new way of running a business, is a relevant element only if the entrepreneur finds a way to bring it to the market, solving a real problem of a cluster of customers that are willing to pay for the product/service offered. Addressing happy, paying customers is the hardest thing to do. The good news though is that methodologies exist to achieve this goal and can be learnt and applied.

### Short Biography

Born in Trieste, he is both an entrepreneur and a manager in the field of Digital and Deep Tech innovation. While running his first company, founded when he was 19, he graduated in electronic

engineering at the Politecnico di Milano. Internet pioneer, he worked for companies such as Italtel, AT&T and Cisco for about 25 years, before becoming CEO of Canon Italia. After more than thirty years of experience in the corporate world, in 2017 he decided to dedicate himself full-time to supporting new startups as a business angel and mentor, activities that took him to CEO of PoliHub position from 2020 until April 2024.

## **Roberto Della Marina**



**Title:** *Venture Capital for early stage Deep tech companies*

### **Abstract**

In this talk the audience will gain valuable insights into the perspective of Venture Capitalists when considering investments in early stage deep tech startups. The discussion will cover essential prerequisites for securing investment, including financial and governance conditions, the importance of team composition and attitude, and the minimum acceptable TRL for deep tech ventures. By contextualizing these factors within the current market landscape, attendees will be equipped with a comprehensive understanding of what it takes to attract venture capital funding for their early stage deep tech companies.

### **Short Biography**

Venture capitalist with focus on Tech Transfer and early stage investment in Deep Tech companies. He is Founder and Managing Partner of [Obloo Ventures](#), which is managing together with CDP (Cassa Depositi e Prestiti, Roma, Italy) [Galaxia](#), the National Aerospace Technology Transfer Hub, a Pre-Seed and Seed Venture Incubator launched by CDP in late 2022. He is also the Founder and Managing Partner of Venture Factory, an advisory company engaged in the management of the Vertis Venture 3 Tech Transfer Fund ([VV3TT](#)). As of today he has screened more than 6500 deals, he is overseeing 26 companies across the two active funds, was able to leverage 3x his equity investment from other funds, one IPO in Wien (Austria), 5 exits with a performance of 4,5x the cash invested.



Previously, after one decade of experience mostly in Switzerland at CERN (Geneva, CH), CSEM SA (Neuchâtel, CH) and Colibrys SA (Neuchâtel, CH), he accepted the position of VP Business Development and Director of Technology Innovation of Olivetti I-Jet SpA (Ivrea, TO). In 2007 he became General Manager of the Cluster in Molecular Biomedicine of Friuli-Venezia Giulia, Italy, a public-private initiative focused on linking together research centers, companies, institutions and financing bodies in the field of personalized medicine. From 2010 till 2017 he worked as Deputy Chairman of AREA Science Park - an Italian National Research body dedicated to Technology Transfer – and as Managing Director of Innovation Factory, its startup incubator.

Between 2015 and 2016 he was appointed as Executive Chairman of BIC Incubatori FVG Srl, one of the largest Italian industrial incubators, managing its turn-around and relaunch. From 2014 to 2023 he was a member of the Board of Directors of the Bruno Kessler Foundation (FBK) in Trento. In 2022 he was appointed member of the Scientific Technical Committee of AREA Science Park and is currently an adjunct professor at the University of Trieste.

Today he continues to serve as Board Member in several portfolio companies. He holds a *Laurea cum laude* in Physics from the University of Trieste and a Ph.D. in Physics from ETH Zürich (CH), is co-author of more than hundred scientific papers (H-index=37 ref. Scopus), and he keeps teaching finance and innovation in some universities and institutions in Italy. In 2015 he won the AIFI-EY “Claudio Dematté Price – Private Equity of the Year” for the best Italian Early Stage operation.

## **Alessia Rotolo**



**Title:** *EIC Accelerator: state of the art and a look to the future*

### **Abstract**

The EIC Accelerator supports individual SMEs in particular startups and spinout companies to develop and scaleup high impact innovations with the potential to create new markets or disrupt existing ones. The EIC Accelerator focuses in particular on innovations, building on scientific discovery or technological breakthroughs where significant funding is needed over a long timeframe before returns can be generated. The EIC Accelerator supports companies where the EIC will act as a catalyst to crowd in other investors necessary for the scale up of the innovation. It supports the later stages of technology already tested and validated in laboratory and relevant environment.

## Short Biography

Alessia is Project Manager in APRE's EIC and Legal & Financial competence team. In addition to a degree in Law and one in Economics, Innovation and Management from the Sapienza University of Rome, she specialized with a Master in international Business from the Catholic University of Milan. She has many years of experience in European research and innovation programs with particular attention to innovation and technology transfer aspects. In APRE she carries out assistance and transversal training activities on the third pillar "Innovative Europe" with particular attention to research aimed at the development of new technologies, technological transfer through the EIC Pathfinder and Transition Accelerator tools as well as on Exploitation aspects with a focus on Business Model and Business Plan. She held numerous courses at universities, research centers, business associations, aimed at researchers and startups on the presentation of innovation projects in the Horizon Europe program.

## Anna De Stefano



**Title:** *Intellectual property and legal design for innovative startups*

### Abstract

Innovation has also important aspects linked to the legal regulation, a good understanding of them can guarantee business value and protection (even if not total) towards competitors/incumbents.

Legal aspects are lively aspects of the business life of a start up and we will show how, with the help of the methodology of legal design, we can deliver business value also from them, also by startups, also by non-legal specialist founders.

### Short Biography

Companies' builder and legal innovator for almost 30 years. Multifaceted expertise and roles. Anna has created and lead a company in the legal information industry, Memento Pratico, for 20+ years, which has become the industry leader in its market segment. Legal Design Expert, to create value, she has been awarded the prize as **European Woman of Legal Tech 2020**.

With her project, **Creative Comma**, she pursues the simplification of the legal language in order to make it more inclusive, clear, engaging, immediately applicable, both for legal professionals, as well as companies, founders, and the society more wide spread.

Designers and Tech experts participate to the project.

**Business Angel**, member of IAG and Club degli Investitori. **Startup Mentor & Advisor** for several Italian and International acceleration programs (Seedstars (CH), Legal Geek (UK), African Business Hero), also as Entrepreneur in Residence.

Business Mentor and speaker for the European International Academy, she is also a lecturer about leadership, team development, communication and pitch, business strategy, legal design, creativity. Member of the **European AI Alliance @EU Commission**

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## Ruggero Frezza



**Title:** *Fostering innovation through universities in Italy, is there a role for catalysts?*

### Abstract

I will explore the role of universities in Italy's technology transfer and venture creation over the past two decades. Drawing from firsthand experience with M31, I'll dissect both successful strategies and notable missteps in fostering entrepreneurial growth. We'll discuss the evolution of Italy's venture capital landscape, including the roles played by accelerators and incubators. Ultimately, we will talk about the profiles of entrepreneurs emerging from academia: who they are, where they are, and how they can be effectively identified and supported to activate the research innovation spiral.

### Short Biography

I hold a PhD in Applied Mathematics from the University of California, Davis, and served as a professor of Control Theory and Robotics at the Università di Padova from 1990 to 2008. During my tenure in academia, I founded several startups, including Vi-grade GmbH, a leader in driving simulation technology. [Vi-grade](#)

In 2008, I established M31, a company dedicated to fostering new tech ventures with a focus on effective technology transfer. Under my leadership, M31 successfully launched nine companies and achieved successful exits for four, including Centervue, which was acquired by Revenio Group; Adaptica by the Vision Group; and Zehus by Eldor Corporation.

The challenges of securing venture capital in Italy prompted a strategic pivot for M31, transforming it into a specialized engineering firm.

## Alexandra Dumitrache



**Title:** *Students and entrepreneurship – the Polimi experience*

### Abstract

This speech delves into the experiences of student entrepreneurs at Politecnico di Milano, highlighting the specific challenges they encounter, and the solutions provided by the Entrepreneurship Club Polimi. As a prominent leader in this association, the speaker will outline the club's initiatives designed to foster a supportive ecosystem for the next generation of innovators and entrepreneurs. The session will detail strategic efforts to empower students, enhance their entrepreneurial skills, and cultivate a culture of innovation and enterprise, preparing them to thrive in the competitive business landscape.

### Short Biography

Alexandra Dumitrache is an aspiring computer scientist interested in quantum computing, AI, startups, and neuroscience, and an active leader in the academic and entrepreneurial communities in Milan, Italy. Currently studying Computer Science and Engineering at Politecnico di Milano, she is set to graduate from her Bachelor in July 2025. She's the president of Entrepreneurship Club Polimi, and the former Vice-President for External Affairs in MESA | EESTEC LC Milan, and Head of IT in SCOUT Consulting Club.