

SEFI 2023 Plenary Panel Event 02

Plenary 2

WHICH ENGINEERING IS NEEDED FOR AI?

12/Sept/2023 (Tue)
11:30am - 1:00pm

Convened by Mr Alex Tarchini and Moderated by members of the **Board of European Students of Technology (BEST) and European Students of Industrial Engineering and Management (ESTIEM)** with Panel Invitees; **Xavier Fouger** (Dassault Systèmes), **Susannah Cooke** (ANSYS), **Marco Rossi** (MathWork), **Martin Koczmann** (Siemens) and **Susie Ye** (Bentley)

Summary

Artificial Intelligence (AI) has become one of the biggest drivers of technological change, impacting industries and creating entirely new opportunities. There is a massive demand in the industry for individuals who possess the skills required to deploy scalable AI applications. Companies of all sizes (from small start-ups to large organizations) hire AI engineers to build machine learning products. Although you do not need to be an expert or practitioner of AI to develop an AI vision and strategy, understanding AI and related subject matter areas is critical to making informed decisions.

We are asking panelists, to elaborate and share with the audience about their company position and:

- to outline **how AI is transforming** the industries served by their companies;
- to report about the **“AI needs”** that their industrial customers are expressing: what skills (technical and soft) are requested to embed AI in engineering design?
- To offer **ways engineering universities could match these needs** (Dual Learning, Micro Certificates, PBL, ...)

Xavier Fouger



Xavier Fouger is an Industrial Engineer, former Science Attaché for the French embassy in Vienna, Xavier joined Dassault Systemes in 1990 to develop innovation processes for automotive manufacturers in Germany and Korea.

He founded the corporate organization in charge of academia, designed learning initiatives for secondary and vocational education in the USA, Malaysia, Canada and France and deployed learning centres in universities in India, China, Brazil, Mexico, South Africa, Kenya, Ivory Coast, Vietnam and Argentina. He created Dassault Systemes' Learning Lab to collaborate with university in educational innovation within projects funded by US and European agencies, focusing on practices enabled by digital technologies: social innovation, precision agriculture, Internet of Things, Virtual Twins, Additive Manufacturing, Collaborative Robotics, Smart Farm/Factory/City/Building and Model Based Systems Engineering. He currently works on industry-inspired learning centres, educational government programs and collaboration with engineering education societies.

- IFEES & GEDC Founding Member
- CTI expert, ASEE fellow, SEFI fellow

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- Member of the Consultative Board of the UNESCO Aalborg Centre for Problem Based Learning
- “Peter the First medal” of the Association for Engineering Education of Russia (AEER)
- “Nikola Tesla chain” of the International Society for Engineering Education (IGIP)

Susannah Cooke



Susannah Cooke is a Senior Product Manager at Ansys, managing Ansys Academic software.

She works with universities to ensure that Ansys tools can be deployed to best effect in teaching and research. She holds an MEng and DPhil in Mechanical Engineering from the University of Oxford, where her doctoral thesis focused on fluid flow around tidal turbine arrays. She has also previously worked for the UK’s research funding agency, UKRI, and she began her engineering career in railway maintenance.”

Martin Koczmann



Martin Koczmann is the Academic Project Manager for the EMEA (Europe, Middle East, and Africa) region at Siemens PLM Software. In this role, he manages academic relations in the EMEA Zone and helps develop and support Siemens PLM Software's academic partner community.

Engagement in dialogues on industry trends, academic best practices, and digital transformation is an integral part of this role. These discussions take place with educators and other professionals, creating a rich exchange of ideas and experiences. There's a significant focus on preparing the next generation of digital talent, with a particular emphasis on the contexts of emerging technologies such as Industry 4.0 and Artificial Intelligence. The goal is to ensure that the future workforce is not only proficient in these technologies but also skilled at integrating them into practical applications that drive industry growth and innovation, while also considering sustainability.

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Susie Ye



Susie Ye is an Education Program Manager from Bentley Systems, an infrastructure engineering software company. Being a technology enthusiast in the engineering industry, Susie loves discovering emerging engineering technologies and how they can contribute to solving real-world problems.

Being an Education Program Manager, her goal is to support young professionals upskill and unlock new career opportunities by providing industry engineering software and expertise to education institutions and engineering students. Having been working in manufacturing, tech and AEC industry, Susie finds herself constantly learning new technologies & innovations and privileged to have benefited from many industry mentors' help. During the learning process, Susie understood the need to develop new talents for the engineering industry in order to build a better world, as well as unlock the power of engineering education that enables talent development.

Marco Rossi



Marco Rossi is member of the MathWorks Academia Team and supports lecturers and researchers in the use of MATLAB and Simulink for teaching and research.

Since 2020, Marco runs curriculum development projects in Hungary, Croatia, Czech Republic, Turkey, South Africa, and many other Universities. Marco graduated in Aeronautical Engineering from La Sapienza in Rome. Since 2015 he worked as Assistant Researcher at TU Dresden in Germany, where in 2019 he obtained a PhD in Mechanical Engineering due to his work on modeling and simulation of soft materials. Marco taught several courses during his academic experience including statics and intelligent materials.