

Lecture - Haifeng Zhu

Venerdì 17 Gennaio 2025 ore 10:30
Aula Magna del Polo di Ingegneria

Title:

Adaptive/Adaptable Systems Engineering (ASE)

Abstract:

Developing complex products often suffers high overrun costs and significant delays, especially in the aerospace industry, which calls for more adaptable designs. In addition, many products constantly require modifications even from the beginning of the development. Efforts addressed these issues about 15 years ago have now developed into a systematic discipline, Adaptable/Adaptive Systems Engineering (ASE), with wide impacts including industrial adoptions. This lecture talks about the basic concepts, properties and major basic results in ASE during the past 20 years. Examples on aircraft, aircraft engine and HVAC system designs will be presented to demonstrate the ASE results and usages in industry.



Biography:

Haifeng Zhu, Ph.D., is a technical discipline leader in Boeing. He has extensive experience in multiple sectors in the manufacturing industry and has led or contributed to many projects. Haifeng is interested in advancing system knowledge and technologies for humanity. It is important to promote awareness of technologies' different effects and use technologies wisely to help human lives and society. He is also an advocator of engineer education, including promoting the awareness of the importance of education and course training to entry-level engineers and the correlations between quality education and the quality outcomes from work. He is also a warm-hearted volunteer for certain charity events and organizations, sometimes helping those using technologies. He devoted some of his time in helping cross-organizational public domain knowledge sharing and stimulating possible collaborations to better serve the local community.