FACULTY SEMINAR
Digital Engineering Factory

Date: May 27th, 2025, 14.15 - 15:00
Place: Narbutta 85, NT129 / on-line

https://us02web.zoom.us/j/87851755309?pwd=bZi8YCwBry3YoayBcqh0qUsydw09N0.1

Dr Alejandro Salado, University of Arizona

Abstract:

Engineering education has the potential to benefit significantly from the deployment of a digital thread. Integrating data across multiple engineering domains would enable students to see a complete end-to-end engineering process, observe the consequences of their decisions downstream, gain experience working collaboratively in a digital environment, and evaluate each other's work more effectively. The Digital Engineering Factory (DEF) is a browser-based collaborative engineering environment to support systems and software engineering students at the University of Arizona, which utilizes the modular University of Arizona Ontology Stack (UAOS) to structure project data and enable the use of semantic web technologies (such as reasoning, model validation and querying). In this presentation, he provides the vision for the DEF, the development approach we have adopted, and our preliminary results and lessons learned.

Position:

Director of Systems Engineering

Associate Professor of Systems and Industrial Engineering at the University of Arizona.

Director of Academic Matters, INCOSE (International Council on Systems Engineering).

Professional and scientific profile:

- https://sie.engineering.arizona.edu/faculty-staff/faculty/alejandro-salado

Research Focus:

Theory of systems engineering, formalization of systems engineering, methods that improve systems engineering practice (in the areas of problem formulation, verification and validation strategies, and system architecture), and engineering education.