

11 JULY 2025, H. 14:00
AUGMENTED HEALTH ENVIRONMENTS LABORATORY
POLO FERRARI 1 - VIA SOMMARIVE 5, TRENTO

This presentation provides an overview of contemporary advances in safe and robotic learning frameworks. It discusses the challenges of achieving robustness, generalization, and safety in robot learning and control. The presentation highlights advancements in learning specific skills, including repetitive periodic motions like sawing, optimizing cloth manipulation, and predicting deformable-on-rigid contact for cleaning tasks. Furthermore, it introduces novel concepts for autonomous performance evaluation, such as using "Task Fingerprints" for task classification and the "Digital Robot Judge" (DR. J) to benchmark robot skills against human performance on standardized task boards.

Speaker: Fares J. Abu-Dakka
NYU Abu-Dhabi, UAE

Safe Robot Learning and Control: Challenges, Strategies, and Innovations

DII SEMINAR

