DII

Seminar

Unleashing Autonomy in Robotics

July 27th 2023, h. 15:00

Girasole room, Polo Ferrari 2, Via Sommarive 9, Trento

Speaker: **Loris Roveda, Università della Svizzera italiana (USI)**

With the rising need to tackle evolving operational challenges and dynamically changing environments, there is a growing demand for robots that can exhibit increased autonomy. Traditionally, robots relied on rigid, pre-programmed controllers, but this paradigm is now giving way to embedded intelligence, encompassing perception, reasoning, control, learning, and adaptive behaviors. This talk offers an overview of the autonomy paradigm in robotics, delving into the potential and limitations of cutting-edge techniques in the fields of machine learning and robotics. Through examples, we explore how these advancements empower robots to face complex scenarios and adapt to unforeseen circumstances, revolutionizing their capabilities.