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Jens Kober, TU Delft

Sept 10th, 2025
starting at 16:30 CET
Vandal Lab, Covivio
Corso Ferrucci 112 - Turin, Italy
Link:
https://tinyurl.com/9y788stb

Robots Learning Through Interactions

The acquisition and self-improvement of novel motor skills is among the most important problems in robotics. Complexity arises from interactions with their environment and humans. A human teacher is always involved in the learning process, either directly (providing data) or indirectly (designing the optimization criterion), which raises the question: How to best make use of the interactions with the human teacher to render the learning process efficient and effective? I will discuss various methods we have developed in the fields of supervised learning, imitation learning, reinforcement learning, and interactive learning and illustrate those with real robot experiments ranging from fun (ball-in-a-cup) to more applied (retail environments).

Jens Kober is an associate professor at the TU Delft, Netherlands. He worked as a postdoctoral scholar jointly at the CoR-Lab, Bielefeld University, Germany and at the Honda Research Institute Europe, Germany. He graduated in 2012 with a PhD Degree in Engineering from TU Darmstadt and the MPI for Intelligent Systems. For his research he received the annually awarded Georges Giralt PhD Award for the best PhD thesis in robotics in Europe, the 2018 IEEE RAS Early Academic Career Award, the 2022 RSS Early Career Award, and has received an ERC Starting grant. His research interests include motor skill learning, (deep) reinforcement learning, imitation learning, interactive learning, and machine learning for control.