

Jens Kober

## Reinforcement Learning for Robot Control

Reinforcement Learning has emerged as one of the most prominent paradigms to enable advanced robot control. A prime example is locomotion of quadrupeds over challenging terrains, where policies learned through RL are now being shipped with commercial robot platforms. Nevertheless, robot RL faces specific challenges as due to their physical embodiment collecting large amounts of real-world interaction data is impossible. To render robot reinforcement learning tractable, prior information can be integrated in various ways, ranging from simulations (sim2real), human demonstrations or corrections, to generative models (e.g., LLMs).