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Talk



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Antonio Loquercio



*February 9th 2022,
starting at 17:00*

Agile Autonomy: Learning High-Speed Flight

I'll present the astonishing potential of deep sensorimotor policies for agile vision-based quadrotor flight. Learning sensorimotor controllers represents a bio-inspired holistic approach that is resilient to noisy sensory observations and imperfect world models. Such deep sensorimotor policies, generally trained in simulation, enable autonomous quadrotors to fly faster and more agile than what was possible before with only onboard sensing and computation. While humans and birds still have the advantage over drones, I will show the current research gaps and discuss possible future solutions. Teaser videos of the results I will present are [Deep Drone Acrobatics](#) and [Learning High-Speed Flight in the Wild](#).

Antonio is currently a PostDoc at the University of California at Berkeley. He works at the intersection of robotics, computer vision and neuroscience at BAIR under the supervision of Prof. Jitendra Malik. He received his doctoral degree at ETH and University of Zurich with the Robotics and Perception Group under the supervision of Prof. Davide Scaramuzza.