ENG-615

Topics in Autonomous Robotics

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Cursus	Sem.	Type
Robotics, Control and Intelligent Systems		Opt.

Language of teaching	English
Credits	4
Session	
Exam	Project report
Workload	120h
Hours	**56**
Courses	32
TP	24
Number of positions	**25**

Frequency

Every 2 years

Remark

Next time: Spring 2023

Summary

Students will be introduced to modern approaches in control and design of autonomous robots through lectures and exercises.

Content

- Thursday March 18, 14:00 to 18:00 - Locomotion control in swimming and legged biorobots - Auke Ijspeert
- Thursday April 15, 14:00 to 18:00 - Tensegrity Robotics - Dario Floreano and Omar Aloui
- Tuesday April 20, 13:30 to 17:30 - Visual perception for robotics - Amir Zamir
- Tuesday April 27, 13:30 to 17:30 - Soft electrically-driven actuators for robotics and haptics - Herb Shea
- Tuesday May 4, 13:30 to 17:30 - Deep learning for Autonomous Vehicles - Alexandre Alahi
- Monday May 10, 9:00 to 13:00 - Robotics for Rehabilitation and Assistance - Mohamed Bouri
- Wednesday May 19, 9:00 to 12:00 - Design and Control of Prosthetic Devices - Silvestro Micera
- Wednesday May 26, 9:00 to 12:00 - Reconfigurable robotics - Jamie Paik

Keywords

Evolutionary Mobile Robotics Modular Locomotion, Human-robot, Interaction, Mobile Robot Design

Resources

Moodle Link

- http://moodle.epfl.ch/course/view.php?id=252