

Autonomous robotics: Action, Perception, and Cognition

Gregor Schöner

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Language

- slides will be in English
- lectures will be in English, sometimes German

Who am I

- theoretical physicist by training, but working in theoretical neuroscience/ cognitive science and motor control for over 20 years
- second life as a roboticist/computer vision person
- way stations: Saarbrücken, Stuttgart, Boca Raton Florida, Bochum, Marseille, Bochum...

What am I?

- Chair Theory of Cognitive Systems
- Director of the Institut für Neuroinformatik
- joint appointment in the Faculty of Physics and Astronomy and in the Faculty of Electrical Engineering and Information Technology

My research

- research in two related areas
 - embodied cognition: motor control, movement planning and representation, decision making, action and spatial memory, visual working memory, perceptual representations, motion perception
 - autonomous robotics: vehicles, manipulators, man-machine interface, object recognition, behavioral organization, learning
- based on the theoretical approach of “DST” (dynamical systems theory) and “DFT” (dynamical field theory)

Oliver Lomp

- will run the exercises
- also available for questions etc.
- Oliver.Lomp@ini.rub.de
- is a AI master himself, now doctoral student at INI
 - developer CEDAR framework
 - higher cognition and perception in DFT

Would your present yourself, please?

- Name

- which discipline

- which semester

- taking this course

 - as course in Angewandte Informatik Master program

 - as “nicht-X Nebenfach”

 - as “Vertiefungsfach”

 - for fun...

Please send this information

■ to Oliver.Lomp@ini.rub.de

■ Name, First name

■ Studienfach

■ Fachsemester

■ Prüfungsordnung

■ Matrikelnummer

Exercises

- hand-outs
- hand-ins!
- will be corrected and discussed by Oliver Lomp
- readings!
- essay!
- rules => pdf

Schedule

- every Thursday 14:15 to 16:00
- exercise from 16:15 to 17:00