

INVITATION TO THE LECTURE SERIES ARTIFICIAL INTELLIGENCE



Time: Tuesday November 5, 2019, 14:00 h

Place: Lecture Hall 1 (HS 1)

Prof. Dr. Elmar Rückert

Institute for Robotics and Cognitive Systems
University of Lübeck

Artificial Intelligence for Autonomous Robots

Artificial intelligence is regarded as one of the most groundbreaking developments of recent times - but what does this term actually mean? Are the often expressed fears of an approaching loss of job, a complete change of our everyday life or even a loss of identity through omniscient machines justified? Prof. Dr. Elmar Rueckert will get to the bottom of these questions in his lecture. He will illustrate the current amazing achievements and capabilities of this technology in the field of robotics with practical examples and will present current developments of biologically inspired decision models for autonomous systems. In this lecture you will learn about probabilistic prediction models that can be implemented in massively parallelizable neural networks. These neural networks are trained by a combination of supervised and unsupervised neuroinspired learning rules and enable complex decisions based on learned internal prediction models. The efficient learning rules allow the model to react to new environmental conditions within seconds and to process high dimensional tactile and visual data. These model properties are essential for reliable, explainable and robust artificial systems.

Hosts: Dr. Johannes Kofler and Dr. Bernhard Nessler
Institute for Machine Learning