



## SEMINAR ANNOUNCEMENT

- WHO:** **PROF. WOLFRAM BURGARD**  
Albert-Ludwigs-Universität Freiburg  
Technische Fakultät  
Autonome Intelligente Systeme  
<http://www2.informatik.uni-freiburg.de/~burgard/>
- WHAT:** **Deep Learning for Robot Navigation and Perception**
- WHEN:** **Wednesday, 7 June 2017, 15:30–16:30**
- WHERE:** Via Claudio 21, Bldg 1, Room T.4



**Abstract** — Autonomous robots are faced with a series of learning problems to optimize their behavior. In this presentation I will describe recent approaches developed in my group based on deep learning architectures for different perception problems including object recognition and segmentation and using RGB(-D) images. In addition, I will present a terrain classification approaches that utilize sound and vision. Furthermore, I will present an approach applying deep network architectures for transferring navigation tasks between environments. For all approaches I will describe expensive experiments quantifying in which way the corresponding approaches extend the state of the art.

**Biosketch** — **WOLFRAM BURGARD** is a professor for computer science at the University of Freiburg and head of the research lab for Autonomous Intelligent Systems. His areas of interest lie in artificial intelligence and mobile robots. His research mainly focuses on the development of robust and adaptive techniques for state estimation and control. Over the past years Wolfram Burgard and his group have developed a series of innovative probabilistic techniques for robot navigation and control. They cover different aspects such as localization, map-building, SLAM, path-planning, exploration, and several other aspects. Wolfram Burgard coauthored two books and more than 300 scientific papers. In 2009, Wolfram Burgard received the Gottfried Wilhelm Leibniz Prize, the most prestigious German research award. In 2010, Wolfram Burgard received an Advanced Grant of the European Research Council. Since 2012, Wolfram Burgard is the coordinator of the Cluster of Excellence BrainLinks-BrainTools funded by the German Research Foundation. Wolfram Burgard is Fellow of the ECCAI, the AAAI, and the IEEE.