

The Field Robotics Center

Seminar Series

Tues, July 9

NSH 1507

2-3 PM

Food and Drinks will be served

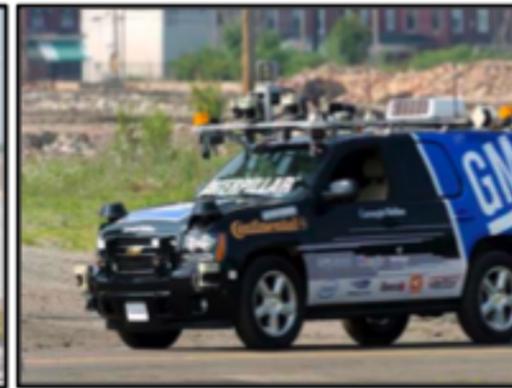


Joerg Dittrich
Research Scientist
DLR Institute of Flight Systems

Unmanned Aircraft Research at the DLR Institute of Flight Systems - Current Research and Future Challenges

The talk introduces the Institute and its work on Unmanned Aircraft Systems. The primary research aspects of the group include automatic dynamic real-time flight path generation, onboard vision processing as a flight controls sensor, systems enabling the shared airspace operation of manned and unmanned aircraft as well as certification aspects for unmanned aircraft systems. Theoretical approaches are being evaluated in simulation and verified using unmanned flying testbeds in helicopter, fixed-wing and parafoil configurations. The second half of the talk would like to introduce a variety of statements, questions and topics of open discussion, trying to describe the speaker's view of future challenges for the UAS research community.

Speaker Bio: Joerg Dittrich is a research scientist and a department head at DLR Braunschweig. DLR is the primary German government funded research organization in the field of aerospace engineering as well as the German space agency, employing around 7000 people across multiple sites in Germany. During his first years at DLR he has been the lead project engineer for ARTIS (Autonomous Rotorcraft Testbed for Intelligent Systems), which deals with automatic flight path generation and flight control, environmental perception and optical navigation methods for unmanned helicopters. Since 2009 he has been responsible for the Unmanned Aircraft department at the Institute of Flight Systems, which focuses its research on the increase of automation, reliability and safety of unmanned aircraft systems across all types and configurations. Joerg graduated from Georgia Tech with a Master's of Science degree in Aerospace Engineering in 2002.



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