



Kolloquiums-Reihe des Instituts für Informatik

Freitag, 29.11.2019, 13:00 Uhr
Institut für Informatik (D5), Albrecht-von-Groddeck-Str 7,
Seminarraum 105 (T1)

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Autonomous Aerial Refueling: An Overview

Aerial refueling is a standard procedure in military applications, currently on manned aircraft. As Unmanned Aerial Vehicles (UAVs) are taking more central and widespread role, both in military and civil applications, automation of existing capabilities for applications on UAVs arises as a necessity. Aerial refueling is one of such existing capabilities, whose automation is not only relevant to the UAVs, but also to manned aircraft for pilot assistance considerations. In this talk, after a short introduction to manned aerial refueling, the automation of aerial refueling will be presented, with concentration on the main phases of the procedure. These phases are rendezvous, close formation flight and docking. For each phase, existing methods will be discussed with their advantages and disadvantages. Remarks will be given on the difficulties or issues that may occur at each phase, and on the possible directions for overcoming them.