



Informatik-Kolloquium

Freitag, den 03.05.2019, 15:00 Uhr,
Seminarraum 105 (T1), Institut für Informatik (D5),
Albrecht-von-Groddeck-Str. 7

Forschungsprojekt:

A Generic Physics-based Model for Simulation of Quadcopters

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Unmanned Air Vehicles (UAVs) or simpler said Drones are recently getting a lot of attention. They are not only used in research but also becoming a part of our daily life. They have diverse use cases such as, search and rescue, facility inspection, delivery or aerial photography. Depending on the use case requirements, the drones are designed differently, some of them have to fly faster; on the other hand some have to lift heavier payloads. Using simulation for designing and testing the drones motivated us in this study where we would like to address how to build a generic physics-based model to simulate a quadcopter.

The process of this study includes the following steps:

- Build a mathematical model of a quadcopter.
- Implement the mathematical model using MATLAB Simulink
- Test the implemented model in different scenarios