For our Team, we are looking for a

## Thesis Candidates (Semester or Master Thesis) for Testing of the Avionics System Communication for an Airship

The Institute of Flight System Dynamics is looking for a thesis candidate (Semester- or Master Thesis) to aid in the bringing up and testing of the communication links for the Avionics System of an Airship. The compatibility of the components needs to be explored in terms of range, bandwidth, packet loss, transmission power, interferences (different frequencies), and antenna placement. The tests will verify the range, reliability, and function of different communication links for airship operations.

## Your Tasks Include

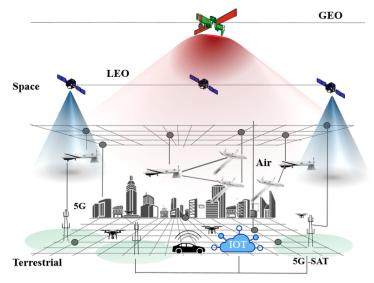
- Commissioning of the components
- Design and construction of a test setup
- Definition of test plans
- Individual tests of the components
- Combined tests with representative antenna placements
- Individual tests of the components
- Combined tests of all components
- Analysis of the results, creation of test reports
- Improvement of the system setup



Source: www.intelligence-airbusds.com

## Requirements

- Experience with electronics and communication protocols
- Experience with radio communications helpful
- Ability to perform part of the work in person (Garching Forschungszentrum)
- Currently enrolled at the Technical University of Munich
- Motivated and committed student with an independent, structured, and self-reliant work style



**Technische Universität München** Lehrstuhl für Flugsystemdynamik Prof. Dr.-Ing. Florian Holzapfel Boltzmannstraße 15 85748 Garching bei München

## Contact:

Nils Schlautmann, M.Sc.

nils.schlautmann@tum.de www.fsd.ed.tum.de

 $https://www.researchgate.net/figure/UAV-communication-entities-including-ground-air-and-space-segments_fig1\_333919084$ 



Opportunities