Julius-Maximilians-
UNIVERSITÄT WÜRZBURG

ZfT ZENTRUM FÜR TELEMATIK E.V.

Informatik VII:
Robotik und
Telematik

Development of a Modular Formation Simulation Framework (Master Thesis/ Practical)

Different formation flying missions are currently under development at ZfT, e.g. the NetSat mission consisting of four CubeSats which was launched in September 2020. To develop and evaluate different formation control strategies as well as to simulate formation topologies, a formation simulation framework has been developed. Now in a first major iteration, the framework will be redesigned in a modular way to enable flexible extension while maintaining good usability.

Tasks
- Understanding of existing formation simulation framework
- Design of a reasonable modular software architecture
- Modularization and transfer of existing simulation modules

Required Previous Knowledge
Profound background in software development, excellent programming skills in Java, background in control theory

Language
German or English

Contact via Mail or Video Chat
Julian Scharnagl: julian.scharnagl@telematik-zentrum.de