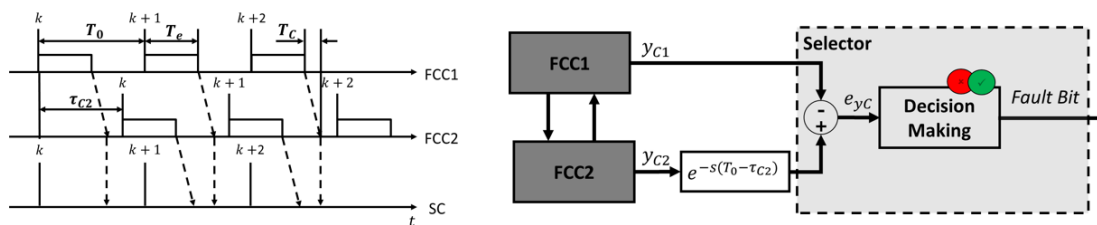


HiWi

Failure Monitoring for Redundant Flight Control Computers



At the Institute of Flight System Dynamics (FSD) we are developing flight control functions for future eVTOL and urban air mobility systems. To provide fault-tolerant flight control in the presence of disturbances, uncertainties and system timing properties, we need your skills to design and validate a failure monitor for redundant flight control computers.

Tasks:

- Function improvement, design and validation in the scope of a real-life research and development project for a large eVTOL vehicle
- Performance and robustness analysis of the monitor by utilization of existing high-fidelity system models with advanced simulation techniques and analysis approaches

Your Profile:

- Interested in model-based flight control system and functions development
- Basic idea of flight mechanics and flight control systems
- Experience in MATLAB and Simulink
- (optional) Basic knowledge in the development of failure monitoring functions

Start: as soon as possible

Sources (from left to right):

<https://www.electrive.net/wp-content/uploads/2022/04/beta-technologies-vtol-2022-01-min.png>

<https://www.businessinsider.de/tech/volocopter-volocity-lufttaxi-flugtaxi-ticket-reservieren-300-euro/>

<https://www.electrive.net/wp-content/uploads/2022/10/wisk-aero-gen6.jpg>

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