

# Master Modellbasierte Realisierung von Resilienztechniken Model-based Realization of Resilience Techniques

### Motivation

Resilience is the ability of a system to withstand adversities and to recover in case of system failure. We want to explore, categorize, support and implement resilience techniques with model-based methods.

## Tasks/Goals

The tasks that must be supported in this thesis are listed in what follows:

- Collect and categorize resilience techniques.
- Research for 20 model-based implementations of this techniques.
- Describe 10 model-based techniques in detail (e.g. applicability, examples)
- Implement an automated applicability check for 3 techniques
- Implement 1 automated model-based application of 1 technique.

#### Requirements

Excellent UML, BPMN and Meta-Modelling skills

#### Remarks

The opportunity to cooperate in writing research paper after the successful submission of the thesis will be provided.

## Organizational

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