

**Thesis Topic****Quality Model for Reactive Systems****Motivation**

With the growing demand for real-time data originating from myriads of Internet-connected devices, the number of requests hitting today's computing infrastructures goes beyond what is manageable for operations and affordable for management. Moreover, the mobile nature inherent to modern communications and interactions requires for software architectures able (1) to reflect the fully decentralized perspective of the execution environment, and (2) to guarantee the provision of dependable functionality. To this end, systems should be *Reactive*: i.e., Responsive, Resilient, Elastic and Message Driven.

<https://www.reactivemanifesto.org/>

**Tasks**

Define and specify a Quality Model with the objective to describe, assess and/or predict Reactive Systems quality

**Prerequisites \***

- Software Engineering and Software Architecture
- Performance Engineering
- Software Metrics

**We offer you**

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**Time frame****Supervisor(s)**

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\* All the course codes, like e.g. 1DV101, refer to courses here at DFM. Similar documented experience from other places will do just as well.