

Thesis Topic**Microservice Architecture – Smart Service Discovery****Motivation**

With evolving Microservice Architecture, Service Discovery plays a key role for all modern applications. In fact, in microservices the application is usually distributed in a network. Individual components get deployed quite often. So, the deployed applications are destructible. This means that, when a component gets deployed, the services need to know the location of other services they are connecting with. The configuration happens automatically whenever a new service instance is created. This process is termed as Service Discovery.

Finding the mainly relevant and best service is very crucial for the service consumers. To this end, Quality of Service (QoS) parameters play a major responsibility.

Tasks

1. Define a Smart Service Discovery mechanism able to monitor registered services and “learn” their behaviour at runtime.
2. Implement a prototype as extension of Apache ZooKeeper and Curator
3. Evaluate the performances of the developed system

Prerequisites *

- Software Engineering (2DV603) and Software Architecture (2DV604)
- Architectures for Service-based Systems (4DV609)
- Advanced Java

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.