From IoT to Cloud Via Fog and SDN

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Deploying and managing distributed applications in an effective way are two open problems in the emerging area of Fog computing.

**Research topics**
- Continuous Reasoning for Continuous Deployment of Fog applications
- Distributed management of Fog applications
- Giò: A Fog computing testbed for research & education
Independent, scalable, fault-resilient microservices have revolutionised modern, cloud-based software development & management.

**Research topics**
- Analysis of microservice-based applications
- Orchestration of services in a serverless world
- Systematic integration of cloud-based applications
**SDN & NFV**

**SDN** (Software-Defined Networking) and **NFV** (Network Functions Virtualization) enable the dynamic definition of network services as chains of network functions.

**Research topics**
- **Placing network functions** in distributed infrastructures to match with conflicting goals
- **Orchestrating network functions** on different virtualization platforms
- **Reconfiguring network services** to cope with changes in networks and resources
Fog Computing  

Clouds & Microservices  

SDN & NFV  