Introduction to Multi Agent Systems

3 ECTS

Lecturer

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Course description

Multi agent systems allow the modeling of interacting processes between autonomous acting individuals in distributed systems while using compact software modules for deployment. On the one hand due to their modularity MAS are very appropriate for the control of inter-enterprise processes that are common in logistics and supply chain management, on the other hand MAS are suitable for the micro-simulation of socio-technical and economic processes.

The MAS lecture provides an introduction into the technical foundations of MAS, like e.g., ontologies and FIPA system architecture and additionally discusses aspects of model design and implementation. In this context the economically and game-theoretically oriented domain of mechanism design is treated jointly with associated aspects like trust and reputation.

In its final part the lecture is mainly concerned with the deployment of MAS technologies in the domain of logistics, supply chain and IT-resource management in practice.

Basic-Literature for preparation
