

Graduiertenkolloquium Angewandte Informatik

Conceptualization of an Agent Framework for Heterogeneous Domain Specific Tasks

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Considering the technological evolution and trends in heterogeneous domains (e.g. healthcare, robotics, smart home, and automated web agents), more and more tasks and processes are outsourced to virtual agents that are able to perform and solve tasks or make recommendations based on sensed observations and contextual information. This evidence correlates with the progressing evolution of IoT device technologies. Meanwhile, smart watches, medical bands, mobile applications as well as smart home platforms move mainstream and are available for affordable costs. This evolution leads also to social implications such as outsourcing tasks to virtual agents in order to save costs and (human) resources. Thereby, the objective of agents is to mimic- based on trained machine learning (ML) models and their made evidences-as good as possible the decisions of human domain experts. The objective of the presented approach is to enable agents to make correct decisions and recommendations by modelling and applying semantic web technologies and machine learning in order to solve individual and similar tasks in an intended way.

For this reason, this work aims for providing a framework that allows the formalisation of use case specific tasks and to simulate/imitate them in a general way so that agents are enabled to train their inherent characteristics and apply the resulting ML models for solving tasks adequately and domain independent.

Termin: **Mittwoch, 27. Februar 2019, 15:45 Uhr**

Ort: **FZI Forschungszentrum Informatik**

Haid-und-Neu-Str. 10-14, 76131 Karlsruhe, Raum Tokio (1.0.40)

(Hinweise für Besucher: <https://www.fzi.de/wir-ueber-uns/so-finden-sie-uns/>)

Veranstalter: Institut AIFB, Forschungsgruppe Web Science

Zu diesem Vortrag lädt das Institut für Angewandte Informatik und Formale Beschreibungsverfahren alle Interessierten herzlich ein.

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