

Kolloquium Angewandte Informatik

Machine Learning Techniques for Knowledge Graphs and Natural Language Processing

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This talk will focus on using data mining and machine learning techniques applied to Knowledge Graphs and Natural Language Processing. First part of the talk gives an insight into various methods and visualization tools allowing interactive knowledge discovery over the web of data for data analytics. A method based on association rule mining for knowledge base completion will also be discussed.

The second part of this talk dives into a combination of Knowledge Graphs and Deep Learning methods for NLP tasks, i.e., it discusses the details of Framester, a linguistic linked data hub with a recent addition of MetaNet (a resource for Metaphors). This resource is further used for generating Frame/Role Embeddings for knowledge reconciliation over the knowledge graphs generated from text.

The third part of this talk gives a vision on other Natural Language Processing tasks that can be performed using the previously defined resources with Deep Learning Techniques such as semantic textual similarity, refining MetaNet metaphors, metaphor generation, metaphor detection/interpretation etc.

Termin: Freitag, 25. Januar 2019, 14:00 Uhr

Ort: Kaiserstr. 89, 76133 Karlsruhe
Kollegiengebäude am Kronenplatz (Geb. 05.20), 3. OG, Raum 3A-11.2
(Hinweise für Besucher: www.aifb.kit.edu/web/Kontakt)

Veranstalter: Institut AIFB, Forschungsgruppe Information Service Engineering

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

A. Oberweis, H. Sack (Org.), A. Sunyaev, Y. Sure-Vetter, M. Volkamer, J. M. Zöllner