SemaNLP

SemaNLP is a special track associated to the SemaPro conference that focuses on all aspects of semanticoriented natural language processing and also considers submissions from related areas like information retreival. The topics include but are not limited to:

- NLP-based ontology and knowledge induction
- Use of semantic networks and ontologies in NLP or information retrieval
- Integration of knowledge into machine learning methods for NLP
- NLP oriented predicate logic
- Semantic-based parsing strategies
- Semantic lexicons
- Discourse representation theory
- Connectionist models of logical and linguistic structures,
- Semantic methods for machine translation,
- Text reuse identification
- Term clustering
- Computational semantics
- Semantic-based authorship and genre prediction
- Semantic-based evaluation for gold standard reference corpora

This track is jointly organized by

- Claudia Lanza, PhD student and research associate at University of Calabria, Italy | PhD visiting student at Université de Nantes, France clanza@dimes.unical.it and
- Dr. Tim vor der Brück, Lecturer at FFHS (Swiss Distance University of Applied Sciences) | Senior researcher at HSLU (Lucerne University of Applied Sciences and Arts) tim.vorderbrueck@hslu.ch.

It takes place the second time after 2019. In comparison to its first instantiation, the number of selected papers could be increased from 2 to 4 excluding two papers that were withdrawn. The submissions covered a wide range of NLP topics, in particular Link Prediction, Word Sense Disambiguation, Textual Entailment, Reasoning, Semantic Similarity, and Text Classification, whereas the participants come from Switzerland, Germany, Japan and Russia.

The total list of selected papers is given below:

Rie Yatabe Word Sense Disambiguation Using Graph-based Semi-supervised Learning <u>19nm732r@vc.ibaraki.ac.jp</u>

Zein Shaheen Large-scale legal text classification using transformer models shaheen@itmo.ru

Helmut Horacek Towards Using Logical Reasoning for Assessing the Structure and State of a Natural Debate <u>helmut.horacek@dfki.de</u>

Tim vor der Brück Employing Bert Embeddings for Customer Segmentation and Translation Matching <u>tim.vorderbrueck@hslu.ch</u>