Dirk Weissenborn

Curriculum Vitae

Education

since 2014 **PhD Student**, *German Research Center for Artificial Intelligence*, Berlin.
Research on machine- & deep-learning for NLP.

2008–2014 **Diplom Informatik (equivalent M.Sc. Computer Science)**, *Technische Universität Dresden*, Dresden, 1.1 (with distinction).
Equivalent to first-class honors
Specialization: Intelligent Systems
Subsidiary: Mathematics

2000-2008 **Abitur**, *Goetheschule Ilmenau*, Ilmenau, 1.1.
Specialization in mathematics and the sciences.

Diploma thesis

Title *Relation Discovery between Indirectly Connected Biomedical Concepts*

Supervisors Dr. Georgios Tsatsaronis, Prof. Michael Schroeder

Description In this thesis a novel approach for relation discovery in the biomedical domain is introduced. The approach is based on the combination of information extracted from structured and unstructured data, represented by a graph. The constructed graph allows for the easy integration of heterogeneous information and discovery of indirect connections between biomedical concepts using machine learning to identify characteristic graph path patterns.

Experience

2013–2014 **Student Assistent**, *Bioinformatics Group, BIOTEC, TU Dresden*, Dresden.
Research on Relation Discovery and Question Answering in the biomedical domain

2012 **Student of Google Summer of Code**, *Open Source Project Dbpedia Spotlight*.
development of a topical classifier trained on Wikipedia, enrichment of wikipedia paragraphs with topical information

2011-2012 **Software Developer**, *T-Systems Multimedia Solutions*, Dresden.
development of a recommender system for Jive, build management in software project

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2008-2010 **Software Developer**, *AvatR*, Dresden.
a startup developing a personal agent for webservices; development of a recommender system, development of a text normalization system

Languages

German **Mother tongue**
English **Fluent**
Spanish **Fluent**
Portuguese **Fluent**

Scholarships

2012 **Scholarship of Germany ("Deutschlandstipendium")**.
2010–2011 **DAAD Scholarship**.
Scholarship for an exchange year abroad in Brazil

Software

MOOD Open-source tool for joint entity linking and word sense disambiguation. Creator.
`https://bitbucket.org/dfki-lt-re-group/mood`
DBpedia Spotlight Open source tool for entity linking. Active member (2012 to 2013).
`https://github.com/dbpedia-spotlight/dbpedia-spotlight`

References

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Publications

[1] Tsatsaronis, G. Balikas, G. Malakasiotis, P. Partalas, I. Zschunke, M. Alvers, M. R. **Weissenborn, D.** Krithara, A. Petridis, S. Polychronopoulos, D. "An overview of the BIOASQ large-scale biomedical semantic indexing and question answering competition". In: *BMC bioinformatics* 16.1 (2015), p. 138.

[2] **Weissenborn, D.** Schroeder, M. Tsatsaronis, G. "Discovering Relations between Indirectly Connected Biomedical Concepts". In: *Journal of Biomedical Semantics* (to appear in 2015).

[3] **Weissenborn, D.** Xu, F. Uszkoreit, H. "DFKI: Multi-objective Optimization for the Joint Disambiguation of Entities and Nouns Deep Verb Sense Disambiguation". In: *Proceedings of the 9th International Workshop on Semantic Evaluations*. ACL, 2015.

[4] **Weissenborn, D.** Hennig, L. Xu, F. Uszkoreit, H. "Multi-Objective Optimization for the Joint Disambiguation of Nouns and Named Entities". In: *53nd Annual Meeting of the Association for Computational Linguistics, July*. ACL, 2015.

[5] **Weissenborn, D.** Schroeder, M. Tsatsaronis, G. "Discovering Relations between Indirectly Connected Biomedical Concepts". In: *Data Integration in the Life Sciences*. Springer, 2014, pp. 112–119.

[6] Mendes, P. N. **Weissenborn, D.** Hokamp, C. "DBpedia Spotlight at the MSM2013 Challenge". In: *Making Sense of Microposts (# MSM2013)* (2013).

[7] **Weissenborn, D.** Tsatsaronis, G. Schroeder, M. "Answering Factoid Questions in the Biomedical Domain." In: *BioASQ@ CLEF* 1094 (2013).