Melanie Tosik

Austin, TX

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melanietosik.com

Education

University of Potsdam, Potsdam, Germany   10/2011 - 09/2015

B.S., Computational Linguistics (GPA: 3.6)

Thesis: "String to Semantic Graph Alignment"

University of Ulster, Northern Ireland, United Kingdom   01/2014 – 05/2014

European Union Erasmus Mundus scholarship (Study Abroad)

Professional Experience

Research Engineer – Natural Language Processing   since 10/2015
WayBlazer
Austin, Texas
Designed and implemented a proprietary question answering system based on state-of-the-art techniques
for natural language understanding and ontology extraction

Research Intern   06/2014 – 08/2014
Textkernel
Amsterdam, The Netherlands
Improved resume parsing for multilingual documents by integrating word embeddings as input features
for a probabilistic sequence labeling model based on conditional random fields

Undergraduate Research Assistant   07/2013 – 04/2014
Applied Computational Linguistics Discourse Research Lab
University of Potsdam
Co-developed a Python tool for automatic coreference resolution within project D1 (Linguistic Database
for Information Structure: Annotation and Retrieval) of DFG funded Collaborative Research Center 632

Student Assistant   04/2012 – 06/2013
Department of Linguistics, University of Potsdam
System administration of department computer lab

Publications

Melanie Tosik, Carsten L. Hansen, Gerard Goossen, and Mihai Rotaru. "Word Embeddings vs
Word Types for Sequence Labeling – the Curious Case of CV Parsing." In *Workshop on Vector
Space Modeling for NLP, NAACL 2015*, Denver.

Teaching Experience

Teaching Assistant   Winter 2014

"Computerlinguistische Techniken" (Techniques in Computational Linguistics)

Instructor: Prof. Dr. Alexander Koller

Department of Linguistics, University of Potsdam

Syllabus includes different parsing algorithms for context–free grammars; fundamental statistical methods such as N–gram language models, Hidden Markov models, and probabilistic context–free grammars

Teaching Assistant   Summer 2013

"Selbstreflexion und Planung" (Self–reflection and Planning)

Department of Linguistics, University of Potsdam

Designed and held a seminar intended to enhance first–year university experiences by imparting the basics of academic organizational structure and learning strategies (examined)

Poster and presentations

Melanie Tosik. "Generating personalized travel recommendations from natural language queries." *Data Day Seattle*, Seattle, 2016.

Carsten L. Hansen, **Melanie Tosik**, Gerard Goossen, Chao Li, Lena Bayeva, Florence Berbain, and Mihai Rotaru. "How to Get the Best Word Vectors for Resume Parsing." In *SNN Adaptive Intelligence / Symposium: Machine Learning 2015*, Nijmegen, 2015.

Melanie Tosik. "Sequence Labelling using Distributional Semantic Vectors and Conditional Random Fields." *Textkernel Tech Talks*, Amsterdam, 2014.

Committee work

Examination Board (Prüfungsausschuss)   since 10/2012

Department of Linguistics, University of Potsdam

Student member

Chair Member of Joint Student Council (Versammlung der Fachschaften)   10/2012 – 10/2013

University of Potsdam

Presided monthly meetings of a university–wide student council in charge of coordinating collaborative efforts and disposing financial resources (up to 35.000 euros per year)

Student Representative (Mitglied im Fachschaftsrat)   11/2011 – 06/2013

Department of Linguistics, University of Potsdam

Languages

German

Native

English
    Fluent (TOEFL iBT score: **119** of 120)

French
    Working knowledge

SKILLS AND INTERESTS

Proficient in Python, C++, Java, R, Git, Make, and related technologies.

Experienced with common NLP/ML toolkits and frameworks (e.g. spaCy, CoreNLP, SciPy, NumPy, TensorFlow, IBM Bluemix).

Familiar with ML algorithms for clustering, classification, sequence labeling, and deep learning.

Versed in knowledge base construction and entity linking using RDF, SPARQL, and DBpedia.

Attended ACL 2016, NAACL 2015, COLING 2014, and EACL 2014 through external funding.

Interested in linguistic variation and new technologies.

REFERENCES

Prof. Dr. Alexander Koller
    Professor of Computational Linguistics   `koller@coli.uni-saarland.de`
    Department of Language Science and Technology   +49 681 302 4345
    Saarland University

Prof. Dr. Manfred Stede
    Professor of Applied Computational Linguistics   `stede@uni-potsdam.de`
    Department of Linguistics   +49 331 977 2691
    University of Potsdam

Dr. Peter Nuernberg
    VP, Development   `peter@nuernberg.us`
    Clockwork Solutions   +1 832 474 2623
    Austin, Texas