# Melanie Tosik

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#### **EDUCATION**

## New York University, New York, NY

expected 05/2019

M.S., Computer Science

# University of Potsdam, Potsdam, Germany

10/2011 - 09/2015

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

Thesis: "String to Semantic Graph Alignment"

#### PROFESSIONAL EXPERIENCE

### **Data Science Consultant**

since 07/2017

Underdog.io

New York, NY

Automated internal processes for resume parsing and candidate-company matching

## Research Engineer - NLP

10/2015 - 06/2017

WayBlazer

Austin, TX

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

### **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.

#### SKILLS AND INTERESTS

- Proficient in Python, Java, C++, R, Git, AWS, NoSQL, Elasticsearch, and related technologies
- Experienced with common NLP/ML toolkits and frameworks, including spaCy, SciPy, NumPy, CoreNLP, IBM Bluemix, etc.
- 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

#### 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.

#### Teaching Experience

# Teaching Assistant

Winter 2014

"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

#### Computational Linguistics Reading Group

Winter 2014

Successfully organized a bi-weekly NLP meetup in Berlin

## Teaching Assistant

Summer 2013

"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)

## LANGUAGES

German	English	French
Native	Fluent	Working knowledge