Oliver Ferschke

Resume

4614 Fifth Avenue, Apt. 219
Pittsburgh, PA 15213, USA
☎ *+1 (412) 979 2440*
✉ *oliver.ferschke@gmail.com*
🖮 *www.ferschke.com*
Citizenship: German
Visa: J1 Research Scholar
Age: 33

Summary of Qualifications

- Five years of experience in interdisciplinary research with a focus on natural language processing.
- Experience in hands-on processing, representation, and manipulation of unstructured text datasets.
- Proficiency in applied machine learning with a particular focus on text classification.
- Experience in leading and working in small to medium-sized open-source software projects.
- Well-versed in effectively presenting to both expert and novice audiences.

Professional Experience

Since 10/2014 (ongoing)	**Postdoctoral Research Associate**, *Language Technologies Institute, School of Computer Science*, Carnegie Mellon University, Pittsburgh, PA, USA.
Since 10/2014 (ongoing)	**Associated Researcher**, *German Institute for International Educational Research (DIPF)*, Frankfurt am Main, Germany.
1/2014–9/2014	**Research Associate**, *German Institute for International Educational Research (DIPF)*, Frankfurt am Main, Germany.
1/2010–12/2013	**Doctoral Researcher**, *Ubiquitous Knowledge Processing Lab*, Technische Universität Darmstadt, Germany.

Degrees

2010 -2014	**Dr.-Ing. (PhD) in Computer Science**, *Technische Universität Darmstadt*, Germany, Thesis: The Quality of Content in Open Online Collaboration Platforms: Approaches to NLP-supported Information Quality Management in Wikipedia. Grade: magna cum laude (very good)
2005 - 2009	**Magister Artium in English Linguistics**, *Julius-Maximilians University of Würzburg*, Germany, Thesis: Semantic Relations in WordNet and the BNC. Equivalent to a Master's degree. Final grade 1.4 on a 5-grade scale (very good)
2004 - 2009	**Staatsexamen in Computer Science and English (double major)**, *Julius-Maximilians University of Würzburg*, Germany. Government licensing examination for future teachers in college preparatory schools. Equivalent to a Master's degree. Final grade 1.9 on a 5-grade scale (good)

Open Source Software Development

DiscourseDB,
A comprehensive and generic discourse representation that alleviates cross-platform discourse analysis.,
Role: Lead Developer.
https://github.com/discoursedb

DKPro Text Classification Framework,
A UIMA-based text classification framework for simplifying machine learning experiments with textual data,
Role: Co-Lead Developer.
https://dkpro-tc.googlecode.com

Java Wikipedia Programming Library,
A Java-based interface for efficient random access to Wikipedia and its revision history,
Role: Co-Lead Developer.
https://jwpl.googlecode.com

Java API for text n-gram frequency data in Web1T format,
A Java tool for efficiently searching n-gram data in the Web 1T 5-gram corpus format,
Role: Co-Lead Developer.
https://jweb1t.googlecode.com

Darmstadt Knowledge Processing Repository (DKPro),
A large collection of UIMA-based software components for NLP,
Role: Developer.
https://dkpro-core-asl.googlecode.com

Honours and Awards

8/2015	Participation grant for the 15th annual GAIN conference funded by the German Academic International Network
6/2015	Early career research fellowship for the participation in the CSCL 2015 early career workshop funded by the National Science Foundation
10/2013	Travel grant for early career researchers in the digital humanities from the Volkswagen Foundation Acceptance rate: 17%
1/2011–12/2013	Three-year PhD scholarship from the state of Hesse, Germany within the research excellence program LOEWE

Leadership

Since 11/2014	**Working Group "Discussion Affordances for Natural Collaborative Exchange"**, *Co-Director* *http://dance.cs.cmu.edu*.
1/2011–12/2013	**LOEWE Research Priority Program "Digital Humanitites"**, *Member of the board of directors*.
8/2008–12/2010	**German Informatics Society (GI)**, *Member of the student advisory board*.

Skills

Natural Languages	**German (native), English (fluent), French (basic)**.
Tools/Frameworks	**UIMA, Maven, Artifactory, Jenkins, Eclipse, Hibernate, Spring**.
Programming Languages	**Java, SQL, LaTeX, XML, HTML**.

Publications

2016   Carolyn P. Rosé and **Oliver Ferschke**. 'Technology Support for Discussion Based Learning: From Computer Supported Collaborative Learning to the Future of Massive Open Online Courses', in: *International Journal of Artifical Intelligence in Education*, (accepted)

Iris Howley, Gaurav Tomar, Diyi Yang, **Oliver Ferschke** and Carolyn P. Rosé. 'Combining Social Recommendation with Expectancy Value Theory for Proposing Helpers in MOOCs', submitted to: *Transactions on Interactive Intelligent Systems*, (in review)

Yohan Jo, Gaurav Tomar, **Oliver Ferschke**, Carolyn P. Rosé, and Dragan Gaševic. 'Data, Analytics, and Intervention: Analyzing Social Influence on Learning Paths and Recommendation', submitted to: *Proceedings of the Sixth Learning Analytics and Knowledge Conference*, (in review)

2015   Miaomiao Wen, **Oliver Ferschke**, and Carolyn P. Rosé: 'Towards Support of Collaborative Reflection, Help Exchange, and Group Learning in MOOCs', in: *Proceedings of the 2nd Workshop on Learning with MOOCs*. New York, NY, USA, October 2015.

Yuan Wang, Ryan Baker, Vincent Aleven, Carolyn P. Rosé, Jonathan Sewall, Octav Popescu, Gaurav Tomar, **Oliver Ferschke**, and Michael Cennamo: 'Interactive Activities in MOOCs', in: *Proceedings of the 2nd Workshop on Learning with MOOCs*. New York, NY, USA, October 2015.

Oliver Ferschke, Iris Howley, Gaurav Tomar, Diyi Yang, Carolyn P. Rosé: 'Fostering Discussion across Communication Media in Massive Open Online Courses', in: *Proceedings of the 11th International Conference on Computer Supported Collaborative Learning*, pp. 459–466, Gothenburg, Sweden, 2015.

Carolyn P. Rosé, **Oliver Ferschke**, Gaurav Tomar, Diyi Yang, Iris Howley, Vincent Aleven, George Siemens, Matthew Crosslin, Dragan Gasevic and Ryan Baker: 'Challenges and Opportunities of Dual-Layer MOOCs: Reflections from an edX Deployment Study', in: *Proceedings of the 11th International Conference on Computer Supported Collaborative Learning*, Interactive Event, pp. 848–851, Gothenburg, Sweden, 2015.

Oliver Ferschke, Diyi Yang, Gaurav Tomar, Carolyn P. Rosé: 'Positive Impact of Collaborative Chat Participation in an edX MOOC', in: C. Conati et al. (Eds.): *Proceedings of the 17th International Conference on Artificial Intelligence in Education*, LNAI 9112, pp. 115–124, Madrid, Spain, 2015.

Iris Howley, Gaurav Tomar, Diyi Yang, **Oliver Ferschke**, Carolyn P. Rosé: 'Alleviating the Negative Effect of Up and Downvoting on Help Seeking in MOOC Discussion Forums', in: *Proceedings of the 17th International Conference on Artificial Intelligence in Education*, Short Paper, pp. 629–632, Madrid, Spain, 2015.

Oliver Ferschke, Gaurav Tomar, Carolyn P. Rosé: 'Adapting Collaborative Chat for Massive Open Online Courses: Lessons Learned', in: *Proceedings of the 4th Workshop on Intelligent Support for Learning in Groups*. Workshop at AIED 2015, pp. 13–18, Madrid, Spain, 2015.

Oliver Ferschke, Diyi Yang, Carolyn P. Rosé: 'A Lightly Supervised Approach to Role Identification in Wikipedia Talk Page Discussions', in: *Wikipedia, a Social Pedia: Research Challenges and Opportunities*. Workshop at ICWSM 2015, pp. 43–47, Oxford, UK, 2015.

2014 Neil Dhruva, **Oliver Ferschke** and Iryna Gurevych: 'Solving Open-Domain Multiple Choice Questions with Textual Entailment and Text Similarity Measures', in: *CLEF 2014 Labs and Workshop, Notebook Papers*, p. 1375–1385, Sheffield, UK, September 2014.

Lucie Flekova, **Oliver Ferschke** and Iryna Gurevych: 'UKPDIPF: A Lexical Semantic Approach to Sentiment Polarity Prediction In Twitter Data', in: *Semeval-2014 Task 9: Sentiment Analysis in Twitter. Proceedings of the 8th International Workshop on Semantic Evaluation*, p.704–710, Dublin, Ireland, August 2014.

Oliver Ferschke:'The Quality of Content in Open Online Collaboration Platforms: Approaches to NLP-supported Information Quality Management in Wikipedia', PhD Thesis, Technische Universität Darmstadt, July 2014.

Johannes Daxenberger, **Oliver Ferschke**, Iryna Gurevych and Torsten Zesch: 'DKPro TC: A Java-based Framework for Supervised Learning Experiments on Textual Data', in: *Proceedings of the 52nd Annual Meeting of the Association for Computational Linguistics. System Demonstrations*, p. 61–66, Baltimore, MD, USA, June 2014.

Lucie Flekova, **Oliver Ferschke** and Iryna Gurevych: 'What Makes a Good Biography? Multidimensional Quality Analysis Based on Wikipedia Article Feedback Data', in: *Proceedings of the 23rd International World Wide Web Conference (WWW 2014)*, pp. 855–866, Seoul, Korea, April 2014.

2013 **Oliver Ferschke**, Iryna Gurevych and Marc Rittberger: 'The Impact of Topic Bias on Quality Flaw Prediction in Wikipedia', in: *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pp. 721–730, Sofia, Bulgaria, August 2013.

Oliver Ferschke, Johannes Daxenberger and Iryna Gurevych: 'A Survey of NLP Methods and Resources for Analyzing the Collaborative Writing Process in Wikipedia', in Iryna Gurevych and Jungi Kim (Eds.): *The People's Web Meets NLP: Collaboratively Constructed Language Resources*, Chapter 5, pp. 121–160, Springer, April 2013.

2012 **Oliver Ferschke**, Iryna Gurevych and Marc Rittberger. 'FlawFinder: A Modular System for Predicting Quality Flaws in Wikipedia - Notebook for PAN at CLEF 2012', in: *CLEF 2012 Labs and Workshop, Notebook Papers*, Online Proceedings, Rome, Italy, September 2012.

Johannes Daxenberger, **Oliver Ferschke** and Iryna Gurevych. 'Wikipedia-based Corpora for Analyzing Revisions, Discussions and Text Quality in Collaborative Writing', in: *Workshop on Automatic Processing of Non-Standard Data Sources in Corpus-Based Research* (Extended Abstract), Cologne, August 2012.

Oliver Ferschke, Iryna Gurevych und Yevgen Chebotar. 'Behind the Article: Recognizing Dialog Acts in Wikipedia Talk Pages', in: *Proceedings of the 13th Conference of the European Chapter of the ACL* (EACL 2012), pp. 777–786, Avignon, France, April 2012.

2011   **Oliver Ferschke**, Torsten Zesch and Iryna Gurevych. 'Wikipedia Revision Toolkit: Efficiently Accessing Wikipedia's Edit History', in: *Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies. System Demonstrations*, pp. 97–102, Portland, OR, USA, June 2011.

2009   **Oliver Ferschke**. 'Semantic Relations in WordNet and the BNC', M.A. Thesis, Universität Würzburg, Januar 2009.