Curriculum Vitae

Personal information

Name	Katharina Lisa Maria Kann
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Education and research experience

from 01/2020	**Assistant Professor of Computer Science:** University of Colorado Boulder, USA
04/2018 - 12/2019	**Postdoctoral Research Associate**: New York University, USA
01/2015 - 09/2017	**PhD in Computer Science**: University of Munich, Germany
10/2012 - 11/2014	**MSc in Computer Science**: Technical University of Munich, Germany (GPA: 1.5)
10/2008 - 11/2011	**BSc in Mathematics** with minor Computer Science: Johannes Gutenberg University Mainz, Germany (GPA: 1.8)
08/2000 - 03/2008	High school: Maria Ward-Gymnasium, Mainz, Germany (**University-entrance diploma** - Abitur; GPA: 1.0; best grade in my year)

Industry and project experience

10/2017 - 03/2018	**Internship at Google Zurich**: Research and software engineering
09/2016 - 12/2016	**Internship at Google Zurich**: Research and software engineering
06/2015 - 09/2015	**Internship at Google London**: Research and software engineering
04/2014 - 11/2014	**Master's thesis** about the topic “Improving Human-Robot Interaction by Applying Incremental Processing of Speech and Non-verbal Signals“
04/2014 - 09/2014	**Student researcher** at fortiss (data collection and gesture recognition with Hidden Markov Models using C#)
12/2013 - 04/2014	**Student researcher** at DLR (design and development of an application to train amputees for the use of hand prosthesis using C#)
10/2013 - 04/2014	**Guided research** about the topic “Gesture Recognition in Robotics“

Stays abroad

09/2011 - 07/2012	**Mandarin language studies** at the Donghua University in Shanghai, China
09/2009 - 07/2010	**ERASMUS** year in Valencia, Spain (university studies at the Universitat de Valencia; language studies at the language school Centre d’idiomes)
04/2008 - 07/2008	**Mandarin language studies** at the EF language school in Beijing, China

Awards

06/2017	Winning system of task 2 of the **CoNLL-SIGMORPHON 2017 shared task on universal morphological reinflection**
05/2017	**Google scholarship** for attending the Lisbon Machine Learning School (LxMLS 2017)
05/2016	Winning system of the **SIGMORPHON 2016 shared task on morphological reinflection**
07/2011	**Scholarship** from the German Academic Exchange Service and the China Scholarship Council for Mandarin language studies in China
09/2009	**ERASMUS scholarship** for university studies in Valencia
03/2009	**Scholarship** from the “Studienstiftung des Deutschen Volkes“

Teaching

Classes	Natural Language Processing (CSCI 5832/LING 5832). CU Boulder, Spring 2020. Natural Language Understanding and Computational Semantics (DS-GA 1012/LING-GA 1012, with Samuel R. Bowman). NYU, Spring 2019. ● *Resulting in a publication at the ACL Student Research Workshop 2019*
Mentoring and supervision	Supervision of undergraduate intern Huiming Jin. LMU Munich, 2017. ● *Resulting in a publication at SCLeM 2017*

Skills

Languages	**German** (mother tongue), **English** (fluent), **Spanish** (fluent), **Chinese** (intermediate, HSK 5 in 2012), **French** (basic), **Latin** (Latinum)
Programming languages	**Java** (good knowledge), **Python** (good knowledge), **C++** (basic knowledge), **C#** (basic knowledge)

Professional service

2020	Co-organizer of the **SIGMORPHON 2020 shared task on unsupervised discovery of morphological paradigms**
2018 - 2019	Co-organizer of the workshop **RepI4NLP**
2018	Co-organizer of the **CoNLL--SIGMORPHON 2018 shared task on universal morphological reinflection**

Publications

Refereed conference papers

Yada Pruksachatkun, Jason Phang, Haokun Liu, Phu Mon Htut, Xiaoyi Zhang, Richard Yuanzhe Pang, Clara Vania, Katharina Kann and Samuel R. Bowman. **Intermediate-Task Transfer Learning with Pretrained Language Models: When and Why Does It Work?** In ACL 2020 (*to appear*).

Huiming Jin, Liwei Cai, Yihui Peng, Chen Xia, Arya McCarthy and Katharina Kann. **Unsupervised Morphological Paradigm Completion**. In ACL 2020 (*to appear*).

Katharina Kann, Samuel R. Bowman and Kyunghyun Cho. **Learning to Learn Morphological Inflection for Resource-Poor Languages**. In AAAI 2020.

Katharina Kann*, Ophélie Lacroix* and Anders Søgaard. **Weakly Supervised POS Taggers Perform Poorly on Truly Low-Resource Languages**. In AAAI 2020.

Katharina Kann. **Acquisition of Inflectional Morphology in Artificial Neural Networks With Prior Knowledge**. In SCiL 2020.

Katharina Kann, Kyunghyun Cho and Samuel R. Bowman. **Towards Realistic Practices In Low-Resource Natural Language Processing: The Development Set**. In EMNLP 2019 (short papers).

Yadollah Yaghoobzadeh, Katharina Kann, T. J. Hazen, Eneko Agirre and Hinrich Schütze. **Probing for Semantic Classes: Diagnosing the Meaning Content of Word Embeddings.** In ACL 2019.

Manuel Mager, Özlem Çetinoğlu and Katharina Kann. **Subword-Level Language Identification for Intra-Word Code-Switching.** In NAACL 2019.

Katharina Kann*, Alex Warstadt*, Adina Williams* and Samuel R. Bowman. **Verb Argument Structure Alternations in Word and Sentence Embeddings**. In SCiL 2019.

Katharina Kann and Hinrich Schütze. **Neural Transductive Learning and Beyond: Morphological Generation in the Minimal-Resource Setting.** In EMNLP 2018.

Katharina Kann, Sascha Rothe and Katja Filippova. **Sentence-Level Fluency Evaluation: References Help, But Can Be Spared!** In CoNLL 2018.

Katharina Kann*, Jesus Manuel Mager Hois*, Ivan Vladimir Meza Ruiz and Hinrich Schütze. **Fortification of Neural Morphological Segmentation Models for Polysynthetic Minimal-Resource Languages**. In NAACL 2018.

Katharina Kann, Ryan Cotterell and Hinrich Schütze. **One-Shot Neural Cross-Lingual Transfer for Paradigm Completion**. In ACL 2017.

Katharina Kann, Ryan Cotterell and Hinrich Schütze. **Neural Multi-Source Morphological Reinflection**. In EACL 2017.

Katharina Kann, Ryan Cotterell, Hinrich Schütze. **Neural Morphological Analysis: Encoding Decoding Canonical Segments**. In EMNLP 2016 (short papers).

	Katharina Kann and Hinrich Schütze. **Single-Model Encoder-Decoder with Explicit Morphological Representation for Reinflection**. In ACL 2016 (short papers).
Workshop papers	Johannes Bjerva, Katharina Kann and Isabelle Augenstein. **Transductive Auxiliary Task Self-Training for Neural Multi-Task Models**. In DeepLo 2019.
	Katharina Kann, Anhad Mohananey, Kyunghyun Cho and Samuel R. Bowman. **Neural Unsupervised Parsing Beyond English**. In DeepLo 2019.
	Katharina Kann, Stanislas Lauly and Kyunhyun Cho. **The NYU System for the CoNLL–SIGMORPHON 2018 Shared Task on Universal Morphological Reinflection**. In CoNLL–SIGMORPHON 2018.
	Manuel Mager, Elisabeth Mager, Alfonso Medina-Urrea, Ivan Meza and Katharina Kann. **Lost in Translation: Analysis of Information Loss During Machine Translation Between Polysynthetic and Fusional Languages**. In All Together Now? Computational Modeling of Polysynthetic Languages 2018.
	Katharina Kann, Johannes Bjerva, Isabelle Augenstein, Barbara Plank and Anders Søgaard. **Character-level Supervision for Low-resource POS Tagging**. In DeepLo 2018.
	Yadollah Yaghoobzadeh, Katharina Kann and Hinrich Schütze. **Evaluating Word Embeddings in Multi-label Classification Using Fine-grained Name Typing**. In Repl4NLP 2018.
	Katharina Kann and Hinrich Schütze. **Unlabeled Data for Morphological Generation With Character-Based Sequence-to-Sequence Models**. In SCLeM 2017.
	Huiming Jin and Katharina Kann. **Exploring Cross-Lingual Transfer of Morphological Knowledge In Sequence-to-Sequence Models**. In SCLeM 2017.
	Katharina Kann and Hinrich Schütze. **The LMU System for the CoNLL-SIGMORPHON 2017 Shared Task on Universal Morphological Reinflection**. In CoNLL–SIGMORPHON 2017.
	Toms Bergmanis, Katharina Kann, Hinrich Schütze and Sharon Goldwater. **Training Data Augmentation for Low-Resource Morphological Inflection**. In CoNLL–SIGMORPHON 2017.
	Katharina Kann and Hinrich Schütze. **MED: The LMU system for the SIGMORPHON 2016 shared task on morphological reinflection**. In SIGMORPHON 2016.
Invited publications	Ryan Cotterell, Christo Kirov, John Sylak-Glassman, Géraldine Walther, Ekaterina Vylomova, Arya D. McCarthy, Katharina Kann, Sebastian Mielke, Garrett Nicolai, Miikka Silfverberg, David Yarowsky, Jason Eisner and Mans Hulden. Søgaard. **The CoNLL--SIGMORPHON 2018 Shared Task: Universal Morphological Reinflection**. In CoNLL 2018.
Unpublished manuscripts	Katharina Kann. **Grammatical Gender, Neo-Whorfianism, and Word Embeddings: A Data-Driven Approach to Linguistic Relativity**. arXiv:1910.09729.

Wenpeng Yin, Katharina Kann, Mo Yu and Hinrich Schütze. **Comparative Study of CNN and RNN for Natural Language Processing**. arXiv:1702.01923.

Talks

Conference talks

02/2020 **Learning to Learn Morphological Inflection for Resource-Poor Languages**
Location: New York
Event: AAAI

01/2020 **Acquisition of Inflectional Morphology in Artificial Neural Networks With Prior Knowledge**
Location: New Orleans
Event: SCiL

11/2019 **Towards Realistic Practices In Low-Resource Natural Language Processing: The Development Set**
Location: Hong Kong
Event: EMNLP

11/2018 **Neural Transductive Learning and Beyond: Morphological Generation in the Minimal-Resource Setting**
Location: Brussels
Event: EMNLP

11/2018 **Sentence-Level Fluency Evaluation: References Help, But Can Be Spared!**
Location: Brussels
Event: CoNLL

06/2018 **Fortification of Neural Morphological Segmentation Models for Polysynthetic Minimal-Resource Languages**
Location: New Orleans
Event: NAACL

08/2016 **Single-Model Encoder-Decoder with Explicit Morphological Representation for Reinflection**
Location: Berlin
Event: ACL

Workshop talks

07/2018 **Character-level Supervision for Low-resource POS Tagging**
Location: Melbourne
Event: DeepLo

Invited talks

10/2019 **Morphological Generation in the Limited-Resource Setting**
Location: University of Pennsylvania
Host: Sihao Chen

10/2019 **Transfer Learning for Low-Resource Natural Language Processing**
Location: CIMAT, Guanajuato
Event: PLAGAA
Host: Adrian Pastor López Monroy

07/2019	**Morphological Generation in the Limited-Resource Setting** Location: Universität Stuttgart Host: Jonas Kuhn
03/2019	**Morphological Generation in the Limited-Resource Setting** Location: IBM Zurich Host: Jasmina Bogojeska
03/2019	**Morphological Generation in the Limited-Resource Setting** Location: Google Zurich Host: Aliaksei Severyn
02/2019	**Morphological Generation in the Limited-Resource Setting** Location: University of Colorado Host: Martha Palmer
02/2019	**Morphological Generation in the Limited-Resource Setting** Location: Carnegie Mellon University Host: Yulia Tsvetkov
07/2018	**Low-resource Morphological Generation with Sequence-to-Sequence Models** Location: University of Melbourne Host: Daniel Beck
10/2017	**Low-resource Morphological Generation with Sequence-to-Sequence Models** Location: New York University Hosts: Sam Bowman and Kyunghyun Cho
10/2017	**Low-resource Morphological Generation with Sequence-to-Sequence Models** Location: Johns Hopkins University Host: David Yarowsky
09/2017	**Neural Sequence-to-Sequence Models for Low-Resource Morphology** Location: University of Copenhagen Host: Anders Søgaard

Invited lightning talks

10/2019	**Low-Resource Languages: A Challenge for Natural Language Processing** Location: University of Michigan Event: Michigan AI Symposium Host: Jenna Wiens