



Katharina Kann

(New York University)

Friday, 2/15/19

2:30 pm Talk, DH 2315
4:00 pm Snacks, LTI 5th Floor

MORPHOLOGICAL GENERATION IN THE LIMITED- RESOURCE SETTING

Katharina Kann is a postdoc working with Sam Bowman and Kyunghyun Cho at NYU in New York. Before that, she was a PhD student under the supervision of Hinrich Schütze at LMU Munich.

The main focus of her research lies on deep learning for natural language processing. In particular, she is interested in morphology and approaches for the low-resource setting. She won the SIGMORPHON 2016 shared task on morphological reinflection as well as more than half of the subtasks of the follow-up edition of the shared task in 2017.

As languages other than English are moving more and more into the focus of NLP, accurate handling of morphology is getting constantly more important. This talk presents approaches to morphological generation, casting morphological inflection and reinflection as character-based sequence-to-sequence tasks.

First, we will generally discuss how to successfully apply neural sequence-to-sequence networks to this type of tasks. Then, the main part of the talk will focus on how to overcome the challenge that limited-resource settings, which are unfortunately common for many morphologically rich languages, pose to neural models, which are known to require large amounts of training data. The approaches covered in this talk include multi-task learning, cross-lingual transfer learning, and meta-learning.