HWIJEEN AHN

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA

MASTER IN LANGUAGE TECHNOLOGIES — Advisor: Eduard Hovy

Aug. 2024

Sogang University

Seoul, Korea

M.S. in Computer Science and Engineering — CGPA: 4.38 / 4.5

Feb. 2021

6-month visiting program to CMU LTI

B.A. IN AMERICAN CULTURE, PSYCHOLOGY — Summa Cum Laude

Feb. 2018

2-year leave of absence as military interpreter

EXPERIENCE

NAVER, CLOVA

Seongnam, Korea

Jan. 2021 - May. 2022

NLP RESEARCH ENGINEER

- Implemented efficient transfer learning methods using model and data parallelism, enabling finetuning GPT3 to downstream tasks
- Researched effect of pretraining corpora on in-context learning of GPT-3 and coauthored NAACL 2022 paper
- Developed python library for pretraining and distributing language models which is used company-wide

PUBLICATIONS

Seongjin Shin*, Sang-Woo Lee*, Hwijeen Ahn, Sungdong Kim, HyoungSeok Kim, Boseop Kim, Kyunghyun Cho, Gichang Lee, Woomyoung Park, Jung-Woo Ha, Nako Sung. On the Effect of Pretraining Corpora on In-context Few-shot Learning by a Large-scale Language Model. NAACL 2022. [pdf]

Hwijeen Ahn*, Jimin Sun*, Chan Young Park*, Yulia Tsvetkov, David R. Mortensen. Cross-Cultural Similarity Features for Cross-Lingual Transfer Learning of Pragmatically Motivated Tasks. EACL 2021 [pdf]

<u>Hwijeen Ahn*</u>, Jimin Sun*, Chan Young Park*, Jungyun Seo. NLPDove at SemEval-2020 Task 12: Improving Offensive Language Detection with Cross-lingual Transfer. *SemEval 2020*. [pdf]

<u>Hwijeen Ahn</u>, Minyoung Seo, Chanmin Park, Juae Kim, Jungyun Seo. Extensive Use of Morpheme Features in Korean Dependency Parsing. In *IEEE BigComp 2019*.

Projects

Measuring the impact of AI on U.S economy

Aug. 2022 - Current

CARNEGIE MELLON UNIVERSITY, LANGUAGE TECHNOLOGIES INSTITUTE

Pittsburgh, PA

- Developing BERT based classifier tailored for patent data classification, discovering AI related patents
- Extracting AI experts from publication dataset with LDA to track their trajectory

Grammar error correction

Jul. 2020 - Sep. 2020

Sogang University, Natural Language Processing Lab

Seoul, Korea

 Proposed method to generate diverse synthetic data using self training and back translation to increase BLEU score by 5.26 and won the NAVER AI RUSH competition with \$10,000 prize

Quantifying cross-cultural similarity

Dec. 2019 - Jul. 2020

CARNEGIE MELLON UNIVERSITY, LANGUAGE TECHNOLOGIES INSTITUTE

Pittsburgh, PA

 Proposed cultural similarity features for cross-lingual transfer that can be used to rank transferable languages and published EACL 2021 paper

Multilingual offensive language detection

Dec. 2019 - Feb. 2020

CARNEGIE MELLON UNIVERSITY, LANGUAGE TECHNOLOGIES INSTITUTE

Pittsburgh, PA

• Devised cross-lingual data selection method for offensive language detection and achieved competitive results in SemEval 2020 including 1st place in Arabic

Dependency Parsing

Jul. 2019 - Sep. 2019

Sogang University, Natural Language Processing Lab

Seoul, Korea

• Incorporated graph based and transition based parser and examined the role of morphemes, accomplishing SOTA in Korean dependency parsing and applied for patent

SKILLS

Programming languages: Python, C

ML libraries: PyTorch, Transformers, Datasets, Pytorch Lightning, MegatronLM, Numpy, Pandas, Scikit-learn Dev environments: Git, Docker, Vim, Tmux, Shell, Linux