HWIJEEN AHN

hahn2@cs.cmu.edu | 412-613-9903 | hwijeen.github.io | www.linkedin.com/in/hwijeenahn/

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

- $\bullet \ \ \text{Implemented in-house library for parameter-efficient transfer learning of Korean GPT3 using model parallelism}$
- Researched effect of pretraining corpora on in-context learning of GPT-3 and coauthored NAACL 2022 paper
- Developed in-house python library for pretraining and distributing diverse language models

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 and studying their career path

Grammar error correction

Jul. 2020 - Sep. 2020

NAVER, CLOVA

Seongnam, 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([merged PR1], [merged PR2]), Datasets, MegatronLM([merged PR]),

Pytorch-Lightning, Numpy, Pandas, Scikit-learn, PySpark

Dev environments: Git, Docker, Vim, Tmux, Shell, Linux, Databricks