

JIE HE

School of Informatics,
University of Edinburgh,
United Kingdom,
j.he@ed.ac.uk,

EDUCATION

PhD., ILCC, School of Informatics.
University of Edinburgh, Advisor: Prof. [Jeff Pan](#).

Sept. 2022 - Expected 2025

M.S., Dept. of Computer Science.
Tianjin University, Advisor: Prof. [Deyi Xiong](#).

Sept. 2019 - Jan. 2022

B.S., Dept. of Software Engineering.
Shandong University.

Sept. 2015 - July. 2019

RESEARCH INTERESTS

My primary research interests are in building Language Technology for All, through natural language understanding and generation. Towards this goal, I have an interest in commonsense knowledge and interpretability. Besides, recently, I am interested in the application of large scale pre-trained language models, and I am currently doing research about chain of thought (COT). Commonsense involves both the usage of commonsense datasets [1] and method incorporating knowledge to NLP models [4, 5, 6]. Interpretability involves the diagnose and analyze the errors of existing models [2] and give the model the ability to explain its prediction. I am also interested in discourse phenomena [3].

PUBLICATION

[1] The Box is in the Pen: Evaluating Commonsense Reasoning in Neural Machine Translation

Jie He*, Tao Wang*, Deyi Xiong, Qun Liu
Accepted by Proc. of **EMNLP 2020 Findings**.
The public test suite can be found at: [\[Github\]](#)

[2] TGEError: An Error-Annotated Dataset and Benchmark Tasks for Text Generation from Pretrained Language Models

Jie He*, Bo Peng*, Yi Liao, Qun Liu, Deyi Xiong
Accepted by **ACL 2021**.

[3] Evaluate Discourse Cohesion in Pre-trained Language Models

Jie He, Wanqiu Long, Deyi Xiong
Accepted by **CODI@Coling 2022**.

[4] MetaXCR: Reinforcement-Based Meta-Transfer Learning for Cross-Lingual Commonsense Reasoning

Jie He, Yu Fu
Accepted by **TL4NLP@Neurips 2022**.

[5] BUCA: A Binary Classification Approach to Unsupervised Commonsense Question Answering

Jie He, Simon Yu, Victor Gutierrez Basulto, Jeff Pan

Accepted by **ACL 2023**.

[6] Meta-RTL: Reinforcement-Based Meta-Transfer Learning for Low-Resource Commonsense Reasoning

Jie He, Yu Fu, Yifang Yang, Qun Liu, Deyi Xiong

In submission.

INTERNSHIP/TRAININGS

1. Research intern in SDU IR LAB 2018.1-2018.6
Advisor: [Zhumin Chen](#)
Constructing Sports News from live text commentary. We designed a deep learning model to fully automatically construct sports news from Live Text.
2. Collaboration with Huawei Noah's Ark Lab. 2020.9-now
Advisor: [Qun Liu](#).
Chinese text error correction. We investigated the error produced by GPT2's text generation.
 - Developed a set of annotation tools for annotation.
 - Built a comprehensive error classification system for the error analysis.
 - Submitted a paper to ACL2021.
3. Research intern in Copenhagen nlp 2021.6-2022.8
Advisor: [Daniel Hershcovich](#)
Systematic analysis of the application of graph neural networks in neural machine translation systems. We use GCN to encode UD, AMR and other semantic/syntax information, and observe whether the introduction of this information will bring performance improvements in some challenging machine translation test sets.
4. Research intern in UCL 2021.9-2022.1
Advisor: [Pasquale Minervini](#)
Systematic research on the application of prompt learning in natural language explanation tasks.

SERVICES

Reviewer: AACL (2022)

SKILLS

Programming	Python, C/C++, Java, Matlab, Latex
Languages	Chinese (native), English (fluent)
Toolkits and Frameworks	PyTorch, Transformers, Numpy, Pandas

SCHOLARSHIP&AWARDS

- PhD Scholarship, School of Informatics, University of Edinburgh
£16,062 per year & the international student tuition fees 10/2022 - 09/2025
- The first prize scholarship in Tianjin University (10%) 2020
- The first prize scholarship in Tianjin University (10%) 2021