

# JIE HE

College of Intelligence and Computing,  
Tianjin University,  
China,  
jieh@tju.edu.cn,  
<https://probe2.github.io>  
+86 18079972621

Data of birth: September 14th,1998

## EDUCATION

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|---|-----------------|
| <b>M.S., Dept. of Computer Science.</b><br>Tianjin University, Advisor: Prof. Deyi Xiong.<br>Major GPA : 84.2/100 | 2019.9 - 2022.1 |
| <b>B.S., Dept. of Software Engineering.</b><br>Shandong University,<br>Major GPA : 85.3/100                       | 2015.9 - 2019.7 |

## RESEARCH INTERESTS

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My primary research goal is to discover method that we can combine different knowledge to make the artificial intelligence being better in understanding and generation, and develop **Language Technology for All**. To achieve this, I identify two major research topics that I'm interested in: commonsense and interpretability. Commonsense involves both the usage of commonsense datasets [1] and method incorporating knowledge to NLP models [5]. 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 [3,4].

## PAPERS

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- [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. (3.5/3.5/4)  
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 ACL2021. (2.5/5/3.5)
  
- [3] Fine-Grained Evaluation for Implicit Discourse Relation Recognition by Using Pre-trained Language Models  
Wanqiu Long, **Jie He**, Deyi Xiong  
Submitted to AAAI 2021.
  
- [4] Evaluate Discourse Cohesion in Pre-trained Language Models  
**Jie He**, Wanqiu Long, Deyi Xiong  
Under revision.
  
- [5] MetaXCR: Reinforcement-Based Meta-Transfer Learning for Cross-Lingual Commonsense Reasoning  
**Jie He**, Yu Fu, Qun Liu, Deyi Xiong  
Under revision.

## INTERNSHIP/TRAININGS

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- Research intern in SDU IR LAB 2018.1-2018.6  
Advisor: [Zhumin Chen](#)  
Constructing Sports News from Live Text Commentary. We aimed to design a DL model to fully automatically construct sports news from Live Text.
- Cooperation with Huawei Noah's Ark Lab. 2020.9-now  
Advisor: [Qun Liu](#).  
Chinese text error correction. We aim to investigate 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.
  - We are considering exploring more generation settings and expanding the size of datasets.
  - To be more.
- Research intern in Copenhagen nlp 2021.6-now  
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 nmt test sets.
- Research intern in UCL 2021.6-now  
Advisor: [Pasquale Minervini](#)  
Systematic research on the application of prompt learning in natural language explanation tasks.

## SKILLS

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<b>Programming</b>	Python, C/C++, Java, Matlab, Latex
<b>Languages</b>	Chinese (native), English (fluent)

## AWARDS

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- The third prize scholarship in Shandong University 2016
- The third prize scholarship in Shandong University 2017
- The first prize scholarship in Tianjin University (10%) 2020
- The first prize scholarship in Tianjin University (10%) 2021