# **CHEN ZHANG**

I am a third-year Ph.D. student at Wangxuan Institute of Computer Technology, Peking University, advised by Prof. Yansong Feng and Prof. Dongyan Zhao.

Currently, my research interests include

(1) NLP for Low-Resource Languages: Enhancing the transparency, inclusivity, and efficiency in human language technology for underrepresented languages;

(2) Complex Reasoning with LLMs: Leveraging the power of large language models in complex scenarios, including long contexts, multiple answers, and specialized domains.

Previously, I worked on question answering, focusing mainly on machine reading comprehension and question answering over knowledge bases.

## EDUCATION

**Ph.D. Student in Natural Language Processing** Wangxuan Institute of Computer Technology, Peking University

**B.Sc. in Computer Science** Department of Computer Science and Technology, Peking University

## SELECTED PUBLICATIONS

1. MULTILINGUALITY & LOW-RESOURCE NLP

MC<sup>2</sup>: Towards Transparent and Culturally-Aware NLP for Minority Languages in China Chen Zhang\*, Mingxu Tao\*, Quzhe Huang\*, Jiuheng Lin\*, Zhibin Chen, Yansong Feng ACL 2024

**Teaching Large Language Models an Unseen Language on the Fly** *Chen Zhang, Xiao Liu, Jiuheng Lin, Yansong Feng* ACL 2024 (Findings)

Can LLMs Learn a New Language on the Fly? A Case Study on Zhuang Chen Zhang, Mingxu Tao, Quzhe Huang, Zhibin Chen, Yansong Feng ICLR 2024 Tiny Paper (Notable)

**Cross-Lingual Question Answering over Knowledge Base as Reading Comprehension** *Chen Zhang*, *Yuxuan Lai, Yansong Feng, Xingyu Shen, Haowei Du, Dongyan Zhao* EACL 2023 (Findings)

2. COMPLEX REASONING WITH LARGE LANGUAGE MODELS

Harder Task Needs More Experts: Dynamic Routing in MoE Models Quzhe Huang\*, Zhenwei An\*, Nan Zhuang, Mingxu Tao, Chen Zhang, Yang Jin, Kun Xu, Kun Xu, Liwei Chen, Songfang Huang, Yansong Feng ACL 2024

**Can Perplexity Reflect Large Language Model's Ability in Long Text Understanding?** *Yutong Hu, Quzhe Huang, Mingxu Tao, Chen Zhang, Yansong Feng* ICLR 2024 Tiny Paper

September 2021 - Now

September 2017 - June 2021

## The Magic of IF: Investigating Causal Reasoning Abilities in Large Language Models of Code

Xiao Liu, Da Yin, **Chen Zhang**, Yansong Feng, Dongyan Zhao ACL 2023 (Findings)

#### Lawyer LLaMA Technical Report

Quzhe Huang\*, Mingxu Tao\*, Chen Zhang\*, Zhenwei An\*, Cong Jiang, Zhibin Chen, Zirui Wu, Yansong Feng Arxiv 2023

3. QUESTION ANSWERING

How Many Answers Should I Give? An Empirical Study of Multi-Answer Reading Comprehension Chen Zhang, Jiuheng Lin, Xiao Liu, Yuxuan Lai, Yansong Feng, Dongyan Zhao ACL 2023 (Findings)

**Relation-Aware Question Answering for Heterogeneous Knowledge Graphs** *Haowei Du, Quzhe Huang, Chen Li, Chen Zhang, Yang Li, Dongyan Zhao* EMNLP 2023 (Findings)

**Extract, Integrate, Compete: Towards Verification Style Reading Comprehension** *Chen Zhang, Yuxuan Lai, Yansong Feng, Dongyan Zhao* EMNLP 2021 (Findings)

A review of deep learning in question answering over knowledge bases Chen Zhang, Yuxuan Lai, Yansong Feng, Dongyan Zhao AI Open 2021

**Why Machine Reading Comprehension Models Learn Shortcuts** *Yuxuan Lai, Chen Zhang, Yansong Feng, Quzhe Huang, Dongyan Zhao* ACL-IJCNLP 2021 (Findings)

(\* Equal Contribution)

## **AWARDS & HONORS**

- Outstanding Graduates of Beijing Ordinary Colleges and Universities, 2021
- Excellent Graduate of Peking University, 2021
- Google ML Winter Camp, Best Project, 2020
- Merit Student of Peking University, 2018 & 2019
- Founder Scholarship, 2018 & 2019

## TEACHING

#### **Teaching Assistant**

- Foundations of Natural Language Processing, Peking University, Spring 2024
- Empirical Methods for Natural Language Processing, Peking University, Spring 2022
- Data Structures and Algorithms, Peking University, Fall 2020 & Spring 2021

#### SERVICES

<b>Reviewer:</b>	ACL, EMNLP, ACL Rolling Review, COLING
Volunteer:	EMNLP 2021 Remote Volunteer

#### SKILLS

Programming:	C/C++, Python
Frameworks:	PyTorch, Megatron
Human Languages:	Chinese (Native), English (Fluent), Japanese (Intermediate)