Miao Li

Ph.D. Candidate miao4@student.unimelb.edu.au

School of Computing and Information Systems, (+61) 04-2074-3839

The University of Melbourne, Parkville, Australia https://oaimli.github.io/

EDUCATION BACKGROUND

Visiting Ph.D. The University of Edinburgh

Mar. 2024 - Present

Institute for Language, Cognition and Computation

Supervised by Prof. Mirella Lapata

Ph.D. The University of Melbourne

Dec. 2020 – Mar. 2025 (Expected)

School of Computing and Information Systems

Supervised by Prof. Eduard Hovy and Dr. Jey Han Lau

M.S. Chinese Academy of Sciences

Aug. 2017 - July 2020

Institute of Software, Chinese Academy of Sciences GPA 88.31/100 (6th/102)

B.S. Northeastern University

Aug. 2013 - July 2017

School of Computer Science and Technology GPA 88.75/100 (9th/272)

RESEARCH INTRERESTS

- Multi-document Processing: Enabling computers to reason over and synthesize dispersed information from multiple complex documents, e.g., synthesizing insights from multiple research articles
- Natural Language Reasoning: Developing advanced language models with reasoning capabilities to output verifiable generations contextually aligned well with given sources with supporting evidence
- Evaluation of Generative AI: Designing effective and efficient evaluation methodologies to assess real-world capabilities of AI, particularly generative models

TECHNICAL SKILLS

- Proficient with problem formulation, data curation, modelling and evaluation methodologies for natural language generation
- Experienced in post-training and experimenting with large language models particularly for tasks involving long and complex contexts
- Familiar with programming in Python and PyTorch, and utilizing frameworks for pre-trained language models (e.g., Transformers and Accelerate)
- · Solid understanding of natural language processing, deep learning and fundamental statistical machine learning

RESEARCH PUBLICATIONS

Aspect-Aware Decomposition for Opinion Summarization

Preprint

Miao Li, Jey Han Lau, Eduard Hovy, Mirella Lapata

NewsBench: A Systematic Evaluation Framework for Assessing Editorial Capabilities of Large
 ACL'24

 Language Models in Chinese Journalism

Miao Li, Ming-Bin Chen, Bo Tang, Shengbin Hou, Pengyu Wang, Haiying Deng, Zhiyu Li,

Feiyu Xiong, Keming Mao, Peng Cheng, and Yi Luo

Proceedings of the 62nd Annual Meeting of the Association for C	Computational Linguistics
A Sentiment Consolidation Framework for Meta-Review General	ation ACL'24
<i>Miao Li</i> , Jey Han Lau, Eduard Hovy	
Proceedings of the 62nd Annual Meeting of the Association for G	Computational Linguistics
Summarizing Multiple Documents with Conversational Structure	e for Meta-review Generation EMNLP'23
<i>Miao Li</i> , Eduard Hovy, Jey Han Lau	
Findings of the Association for Computational Linguistics: EMN	VLP 2023
DeltaScore: Fine-grained Story Evaluation with Perturbations	EMNLP'23
Zhuohan Xie, Miao Li, Trevor Cohn, Jey Han Lau	
Findings of the Association for Computational Linguistics: EMN	VLP 2023
Compressed Heterogeneous Graph for Abstractive Multi-documents	ent Summarization AAAI'23
Miao Li, Jianzhong Qi, Jey Han Lau	
Proceedings of the 37th AAAI Conference on Artificial Intelligen	nce
 Personalized Abstractive Opinion Tagging 	SIGIR'22
Mengxue Zhao, Yang Yang, Miao Li, Jingang Wang, Wei Wu, I	Pengjie Ren, Maarten de Rijke
and Zhaochun Ren	
Proceedings of the 45th International ACM SIGIR Conference o	n Research and Development in
Information Retrieval	
A Benchmark and Comprehensive Survey on Knowledge Graph	Entity Alignment via VLDBJ'22
Representation Learning	
Rui Zhang, Bayu Distiawan Trisedy, Miao Li, Yong Jiang, Jianz	chong Qi
The International Journal on Very Large Data Bases	
A Topic Augmented Text Generation Model: Joint Learning of Services	emantics and Structural Features EMNLP'19
Hongyin Tang, <u>Miao Li</u> , Beihong Jin	
Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and	
the 9th International Joint Conference on Natural Language Processing	
A New Effective Neural Variational Model with Mixture-of-Gau	ussians Prior for Text Clustering ICTAI'19
Miao Li, Hongyin Tang, Beihong Jin, Chengqing Zong	
2019 IEEE 31st International Conference on Tools with Artificia	al Intelligence
Clustering Large-Scale Origin-Destination Pairs: A Case Study f	for Public Transit in Beijing UIC'18
Miao Li, Beihong Jin, Hongyin Tang, Fusang Zhang	
The 15th IEEE International Conference on Ubiquitous Intellige	ence and Computing
HONORS & AWARDS	
Google Conference Scholarship, Google Inc.	Jan. 2023
 AAAI-23 Student Scholarship, AAAI 	Jan. 2023
 National Scholarship for Graduates (top 2%), Education Ministry 	y of China Nov. 2018
First Prize Scholarship of University of Chinese Academy of Sci	iences (top 8%), twice Oct. 2017 & 2018
Excellent Student Cadre of University of Chinese Academy of S	ciences, twice Jun. 2018 & 2019
 Merit Student of University of Chinese Academy of Sciences, tw 	vice Jun. 2018 & 2019
Outstanding Graduate of Northeastern University	Jun. 2017
Outstanding Graduate Thesis Award of Northeastern University	(1/272) Jul. 2017

• National Scholarship for Undergraduates (top 2%), Education Ministry of China

Oct. 2016

• The first prize scholarship of Northeastern University (top 4%), twice

• Excellent Student Cadre of Northeastern University, twice

Oct. 2015 & 2016 Sep. 2015 & 2016

• Honorable Mention in MCM/ICM 2015

Mar. 2015

PROFESSIONAL SERVICES

- Reviewer for ACL Rolling Review (2021 Present)
- Member of reviewer committees:

NLPCC 2022-2023, EACL 2023, ACL 2023-2024, EMNLP 2023-2024, NAACL 2025

• Sub-reviewer for WSDM 2022, SIGIR 2022, SIGKDD 2022, and CIKM 2022