

Mieradilijiang Maimaiti

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🎓 Education

Preparatory	2007.09 – 2008.07
School of Chinese Language & Literature Xinjiang University	Urumqi
B.S	2008.09 – 2012.07
Computer Science & Technology School of Information Science & Technology Xinjiang University	Urumqi
M.S	2012.09 – 2015.06
Software Engineering School of Information Science & Technology Xinjiang University	Urumqi
Ph.D.	2015.09 – 2021.06
Computer Science & Technology Dept of Computer Science & Technology Tsinghua University	Beijing

💼 Work Experience

Chinese Academy of Sciences (Xinjiang Branch)	2023.04 – Present
Research Assistant	Laboratory of Multilingual Information Technology

- Base: Urumqi, Xinjiang, China
- Project: New Frontiers of Natural Language Generation in Low-Resource Scenario
- Contribution: I introduced the code-switching approach for cross-lingual knowledge retrieval by incorporating the regularization term into the multi-lingual pre-trained model. Moreover, I tried to exploit the method mentioned above for data augmentation in a fully unsupervised manner. Besides, I explored some efficient supervised fine-tuning (SFT) methods for large-scale language models (LLM) under low-resource scenarios.

ALIBABA DAMO ACADEMY	2021.07 – 2023.03
NLP Senior Algorithm Engineer	Multilingual Group, Machine Intelligence Lab

- Base: Hangzhou, Zhejiang, China
- Project: Multilingual processing for international E-commerce platforms DARAZ, LAZADA, and AliExpress (smart customer service system)
- Contribution: The owner of the DARAZ algorithm, both the FAQ and the Agent Intent Classification models. I contributed to the multilingual intelligent customer service system for AliExpress. I also proposed an improved code-mixing strategy and achieved better results in some languages of LAZADA with an average score of 4 points. I also presented some approaches for the pre-training part and achieved remarkably better results for the whole DARAZ system with 13 points (offline tests) and 9 points (online tests).

ALIBABA DAMO ACADEMY	2020.07 – 2021.7
Research Intern	Multilingual Group, Machine Intelligence Lab

- Base: Hangzhou, Zhejiang, China
- Project: Urdu-Roman Transliteration for smart customer service system
- Contribution: I presented a hybrid model that can solve the main challenges (many-to-one mapping and inconsistent mapping) in this task. Moreover, the proposed approach is embedded in the dialog system of the international e-commerce platform DARAZ.

Beijing Silk Road Heli Investment Management Group Co.,Ltd	2019.07 – 2019.12
CTO	Information Services Department

- Base: Beijing, China
- Project: Multi-Lingual E-commerce Platform

- Contribution: I had instructed our team to develop a multilingual e-commerce platform with front-end and back-end written by us instead of using other frameworks. The system is flexible and extensible and can be effortlessly converted into an online teaching or training system.

Previous work experiences which I have undertaken please refer to my [home page](#).

2009 – 2018

Project Experience

- Projects I am currently leading
 - **NSFC Young Scientists Fund** 2025.01 – 2027.12
 “Research on Machine Translation Methods for Resource-Scarce Languages Based on Large Models”
 - * Level: National
 - * Institution: Chinese Academy of Sciences (Xinjiang Branch)
 - * Funding: 300,000 RMB
 - * Status: Not Started Yet
 - **Xinjiang Tianchi Talents Program (Youth Doctoral Program)** 2024.01 – 2027.01
 “Research on Low-Resource Neural Machine Translation Methods Based on LLM”
 - * Level: Provincial
 - * Institution: Chinese Academy of Sciences (Xinjiang Branch)
 - * Funding: 750,000 RMB (with a specified maximum of 900,000 RMB)
 - * Status: Ongoing
 - **CAS Special Research Assistant Funding** 2024.01 – 2026.01
 “Performance Optimization of Low-Resource Language Translation Based on SFT of Large Models”
 - * Level: CAS Level (Institutional Level)
 - * Institution: Chinese Academy of Sciences (Xinjiang Branch)
 - * Funding: 600,000 RMB (with a specified maximum of 600,000 RMB)
 - * Status: Ongoing
- Selected mainly involved projects
 - **Tsinghua University**
 - * **NSFC** 2014.01 – 2018.08
 “Theories and Methods of Internet Chinese Information Processing Oriented to the Triadic Space”
 - Level: National (973 Program)
 - Mentor: Academician Maosong Sun
 - Funding: 24.38 million RMB
 - Status: Completed
 - Contribution: Mainly responsible for developing a Uyghur-Chinese bidirectional neural machine translation system, which has been expanded to provide translation services between multiple languages along the “One Belt and One Road” countries.
 - * **NSFC** 2015.01 – 2017.12
 “Language Problem Solving and Answer Generation Key Technology & System”
 - Level: National (863 Program)
 - Mentor: Professor Yang Liu
 - Funding: 7.18 million RMB
 - Status: Completed
 - Contribution: Primarily responsible for data preparation, data preprocessing, and related model training, as well as front-end system development.
 - * **NSFC (International Cooperation Project)** 2018.01 – 2020.12

‘Research on Deep Learning-based Chinese-Portuguese Machine Translation Methods’

- Level: National
- Mentor: Professor Yang Liu
- Funding: 2 million RMB
- Status: Completed
- Contribution: Mainly responsible for the development of a low-resource neural machine translation system.

* **NSFC** 2015.01 – 2019.12
“Research and Implementation on Machine Translation Methods Oriented to Multi-level Discourse Semantics”

- Level: National
- Mentor: Professor Yang Liu
- Funding: 3.5 million RMB
- Status: Completed
- Contribution: Primarily responsible for data preparation, data preprocessing, and related model training.

* **NSFC** 2014.01 – 2018.12
“Basic Theories and Key Technologies for Cross-lingual Public Opinion Analysis”

- Level: National (**Key Program**)
- Mentor: Professor Yang Liu
- Funding: 2.85 million RMB
- Status: Completed
- Contribution: “Mainly responsible for the development of a cross-language information retrieval system, which involves web crawling and data collection from Uyghur, Tibetan, and Mongolian websites, and achieves cross-language search by calling self-developed minority language machine translation interfaces.”

* **NSFC** 2014.01 – 2016.12
“Comprehensive Analysis of Online Public Opinion and Cloud Service Key Technology Research and Application Demonstration for Ethnic Minorities”

- Level: National (**Ministry of Science and Technology**)
- Mentor: Professor Yang Liu
- Funding: 784,000 RMB
- Status: Completed
- Contribution: Mainly responsible for training minority language text sentiment classification models and optimization.

* **University-Enterprise Cooperation Project** 2017.01 – 2018.12
“Deep Learning-based Uyghur-Chinese Machine Translation”

- Level: Enterprise level
- Mentor: Professor Yang Liu
- Status: Completed
- Contribution: Mainly served as a technical consultant for the development of the Uyghur-Chinese bidirectional machine translation engine, providing technical guidance and corresponding code.

– **Xinjiang University**

* **Ministry of Industry and Information Technology Science and Technology** 2014.01 – 2017.01
“Android-based Uyghur Voice Control System”

- Level: National
- Mentor: Academician Wushouer Silamu
- Status: Completed
- Contribution: Developed the complete Android system and constructed the Uyghur slot grammar files (used for the speech recognition module).

* **NSFC** 2013.01 – 2017.01

“Research on a Large-Scale Uyghur Sentiment Analysis Software Based on the Web”

- Level: National
- Mentor: Academician Wushouer Silamu
- Status: Completed
- Contributions: Development of a Uyghur stem extraction preprocessing tool, creation of a manual part-of-speech (POS) tagging platform, establishment of a POS tagging review platform, and implementation of an automatic stem extraction and POS tagging system.

* **NSFC** 2012.01 – 2015.01

“Software Development for Export to Central and Western Asia”

- Level: National
- Mentor: Academician Wushouer Silamu
- Status: Completed
- Contributions: Proofreading, statistics, and organization of the Arabic version of Windows 7.

* **NSFC** 2011.01 – 2014.01

“Research on Uyghur Handwriting Identification”

- Level: National
- Mentor: Academician Wushouer Silamu
- Status: Completed
- Contributions: C++ development and system testing.

Academic Achievements

• Selected Papers

1. **Mieradilijiang Maimaiti**, Yang Liu*, Yuanhang Zheng, Gang Chen, Kaiyu Huang, Ji Zhang, Huanbo Luan and Maosong Sun, “Segment, Mask, and Predict: Augmenting Chinese Word Segmentation with Self-Supervision”, In International Conference on Empirical Methods in Natural Language Processing (**EMNLP**), p2068-2077, **2021** (CCF Class B)
2. **Mieradilijiang Maimaiti**, Yang Liu*, Huanbo Luan, and Maosong Sun, “Data Augmentation for Low-Resource Languages NMT Guided by Constrained Sampling”, In International Journal of Intelligent Systems (**IJIS**), volume 37, p30-51, **2021** (SCI Q2)
3. **Mieradilijiang Maimaiti**, Yang Liu*, Huanbo Luan, Zegao Pan, and Maosong Sun, “Improving the Data Augmentation for Low-Resource NMT Guided by POS-Tagging and Paraphrase Embedding”, In ACM Transactions on Asian and Low-Resource Language Information Processing (**TALLIP**), volume 20, issue 6, p1-21, **2021** (CCF Class C)
4. **Mieradilijiang Maimaiti**, Yang Liu*, Huanbo Luan, and Maosong Sun, “Enriching the Transfer Learning with Pre-trained Lexicon Embedding for Low-Resource Neural Machine Translation”, In Tsinghua Science & Technology (**TST**), volume 27, issue 1, p150-163, **2020** (SCI Q1)
5. **Mieradilijiang Maimaiti**, Yang Liu*, Huanbo Luan, and Maosong Sun, “Multi-Round Transfer Learning for Low-Resource NMT Using Multiple High-Resource Languages”, In ACM Transactions on Asian and Low-Resource Language Information Processing (**TALLIP**), volume 18, issue 4, p1-26, **2019** (CCF Class C)

6. **Mieradilijiang Maimaiti**, Shunpeng Zou*, Xiaoqun Wang, Xiaohui Zou, “How to Understand: Three Types of Bilingual Information Processing?”, In International Conference on Cognitive Systems and Signal Processing (ICCSP), volume 1006, p3-16, **2019** (EI Indexing)
7. **Mieradilijiang Maimaiti**, Xiaohui Zou*, “Discussion on Bilingual Cognition in International Exchange Activities”, In International Conference on Intelligence Science (ICIS), volume 539, p167-177, **2018** (EI Indexing)
8. **Mieradilijiang Maimaiti***, Yuanhang Zheng*, Ji Zhang, Fei Huang, Yue Zhang, Wenpei Luo, Kaiyu Huang, “Improving Multi-lingual Representation for Semantic Retrieval with Code-switching”, In International Journal of XXXXX, 2024 (SCI Q1), **under review**
9. Zhe Li*, **Mieradilijiang Maimaiti***, Jiabao Sheng, Zunwang Ke, Wushour Slamu, Qinyong Wang, Xiuhong Li, “An Empirical Study on Deep Neural Network Models for Chinese Dialogue Generation”, In Symmetry-Basel (Symmetry), volume 12, issue11, p1756-1772, **2020** (SCI Q2), **co-first author**
10. Wenshen Xu*, **Mieradilijiang Maimaiti***, Yuanhang Zheng, Xin Tang, and Ji Zhang†, “Auto-MLM: Improved Contrastive Learning for Self-supervised Multi-lingual Knowledge Retrieval”, In International Journal of YYYYYY, 2024 (SCI Q1), **co-first author, under review**
11. Jianhai Zhang, **Mieradilijiang Maimaiti**, Xing Gao, Yuanhang Zheng, and Ji Zhang*, “MGIMN: Multi-Grained Interactive Matching Network for Few-shot Text Classification”, In International Conference on North American Chapter of the Association for Computational Linguistics (NAACL), p1937-1946, **2022** (CCF Class B)
12. Bo Chen*, Jiayi Liu*†, **Mieradilijiang Maimaiti**, Xing Gao and Ji Zhang, “Generating Persuasive Responses to User Reviews with Multi-Source Textual Knowledge in E-commerce”, In International Conference on Information and Knowledge Management (CIKM), p2994-3002, **2022** (CCF Class B)
13. Yuanhang Zheng, Zhixing Tan, Meng Zhang, **Mieradilijiang Maimaiti**, Huanbo Luan, Maosong Sun, Qun Liu and Yang Liu, “Self-Supervised Quality Estimation for Machine Translation”, In International Conference on Empirical Methods in Natural Language Processing (EMNLP), p2068-2077, **2021** (CCF Class B)
14. Turghun Tayir, Lin Li, Xiaohui Tao, **Mieradilijiang Maimaiti**, Ming Li, Jianquan Liu, “Visual Pivoting Un-supervised Multimodal Machine Translation in Low-Resource Distant Language Pairs”, In International Conference on Empirical Methods in Natural Language Processing (EMNLP), **2024** (CCF Class B)
15. Turghun Tayir, **Mieradilijiang Maimaiti**, Jianquan Liu, “Low-Resource Machine Translation with Different Granularity Image Features”, In The 7th Chinese Conference on Pattern Recognition and Computer Vision (PRCV), **2024** (CCF Class C)
16. Hongbin Na, Zimu Wang, **Mieradilijiang Maimaiti***, Tong Chen, Wei Wang, Tao Shen, Ling Chen, “Re-thinking Human-Like Translation Strategy: Integrating Drift-Diffusion Model with Large Language Models”, International Conference of ZZZZZ, **2024** (CCF Class B), **Corresponding author, under review**
17. **Mieradilijiang Maimaiti**, Wushouer Silamu, Nuermaiti Youluwasi, Reyiman Tuerxun, Ainiwaer Tuoheti, “Development of Uyghur Voice Control System Based on Smart Phone” [J]. Computer Applications and Software, **2016.6**, 33(06): 220-223+305. (CSCD, Chinese paper)
18. **Mieradilijiang Maimaiti**, Wushouer Silamu, Reyiman Tuerxun, Dilinigaer Rexiati, “Design and Development of Product Management Software Based on the Windows Mobile Platform” [J]. Journal of Xinjiang University (Natural Science Edition), **2014.11**, 31(04): 465-469.(CSSCI, Chinese paper)
19. **Mieradilijiang Maimaiti**, Wushouer Silamu, Dilinigaer Rexiati, Paerhati Dawuti, “Research and Development of Chinese Learning Software Based on Smart Devices” [J]. Journal of Xinjiang University (Natural Science Edition), **2014.5**, 31(2): 205-211.(CSSCI, Chinese paper)
20. Yi Dawa, **Mieradilijiang Maimaiti***, “Research on Lateral Processing and Communication Technologies for Similar Languages along the Silk Road Economic Belt” [J]. Journal of Xinjiang Normal University(Natural Sciences Edition), **2014.12**,33(4): 66-74.(CSSCI, Chinese paper), **Corresponding author**

21. Yi Dawa, Xianhui Wang, **Mieradilijiang Maimaiti**, “Implementation of Hudum-Otto Text Transliteration Based on Statistical Machine Translation Techniques” [J]. Journal of the Western Mongolian Studies, **2014.2**, 2: 62-71.(CSSCI, Chinese paper), **Corresponding author**
 22. Dilinigaer Rexiati, Wushouer Silamu, Ainiwaer Tuoheti, **Mieradilijiang Maimaiti**, “Research on the Development of Keyboard Standards for Uyghur, Kazakh, and Kyrgyz Languages” [J]. Journal of Xinjiang University (Natural Science Edition), **2014.2**, 31(1): 102 -108.(CSSCI, Chinese paper)
 23. Xiaobing Zhao, Lu Gao, Dingguo Gao, Wugede Bao, **Mieradilijiang Maimaiti**, Yang Liu ,Zhijie Cai, and Yuan Sun*, “Minority Languages Word Segmentation Technology Evaluation Dataset MLWS2021”, In China Scientific Data, 2022.
 24. A full list of publications from 2014 to 2016 can be found on my [Homepage](#).
- China Computer **Patent for Invention**
 - Authorized
 - * **Mieradilijiang Maimaiti**, Yang Liu, Huanbo Luan and Maosong Sun, “Unsupervised Domain Adaptation for Neural Machine Translation” , **Computer Patent for Invention**, China Patent Application No: **201710139214.0**, Authorization number: CN 107038159 B, China Patent number: ZL 2017 1 0139214.0;
 - * Maosong Sun, **Mieradilijiang Maimaiti**, Yang Liu and Huanbo Luan, “The Training Method for Neural Machine Translation” , **Computer Patent for Invention**, China Patent Application No: **201810845896.1**, Authorization number: CN 109117483 B, China Patent number: ZL 2018 1 0845896.1;
 - * Yang Liu, **Mieradilijiang Maimaiti**, Huanbo Luan and Maosong Sun, “The System and Method for Low-Resource Neural Machine Translation Based on Data Augmentation” , **Computer Patent for Invention**; China Patent Application No: **202110857215.5**, Authorization number: CN 113673259 B, China Patent number: ZL 2021 1 0857215.5;
 - Under Review
 - * **Mieradilijiang Maimaiti**, Wentao Xiao, Xi Zhou, Yupeng Ma and Yating Yang, “The Method for Semantic Understanding based on Cross-Lingual Representation Learning” , **Computer Patent for Invention**; China Patent Application No: **202410332204.9**;
 - * **Mieradilijiang Maimaiti**, Xiaobo Wang and Dawulie Jinensibieke, “A Method for Relation Extraction Corpus Construction under Low-Resource Scenarios using Multi-lingual Machine Translation” , **Computer Patent for Invention**; China Patent Application No: **202411148768.3**;
 - Under Submit
 - * Yifei Li, Xi Cheng, **Mieradilijiang Maimaiti**, Taihong Zhang, “A Machine Translation Method for Low-Resource Languages Based on Active Learning”, 2024.9.17. (**Processing by the Agency**)
 - Computer **Software Copyright**
 - 2014-3-11 “Uyghur Multi-Script Conversion Software”, Registration Number: 2014SR029071; Published;
 - 2014-4-8 “Chinese Learning Software Based on the Android Platform”, Registration Number: 2014SR039439; Published;
 - 2014-5-14 “Large-Scale Uyghur Information Management Software for Training Institutions”, Registration Number: 2014SR060362; Published;
 - 2014-8-15 “Multilingual Web Text Collection and Processing Software for Uyghur, Kazakh, and Kyrgyz”, Registration Number: 2014SR147362; Published;
 - 2014-9-9 “Uyghur Voice Control Assistant Software Based on the Android Platform”, Registration Number: 2014SR160254; Published;
 - 2016-2-16 “Uyghur Manual Part-of-Speech Tagging and Corpus Construction System”, Registration Number: 2016SR031180; Published;
 - 2016-3-14 “Uyghur Automatic Part-of-Speech Tagging System”, Registration Number: 2016SR052763;

Published;

- 2016-12-19 “Uyghur Automatic Stem Extraction and Part-of-Speech Tagging System”, Registration Number: 2016SR379408; Published;
- 2019-01-30 “Multilingual and Multi-Script Encoding Conversion Tool Software Based on Python”, Registration Number: 2019SR0110291; Published;
- 2019-01-30 “Multilingual Online Machine Translation System for Low-Resource Languages”, Registration Number: 2019SR0108620; Published;
- 2024-07-22 “Low-Resource Machine Translation Software Based on Transformer”, “Registration Number: 2024SR1037591; Unpublished;”

Academic Services

- Part-time Positions in Domestic Academic Institutions (Specialized Committees)
 - Member of the Chinese Association for Artificial Intelligence (CAAI);
 - Member of the China Computer Federation (CCF);
 - Professional Member of the Chinese Information Processing Society (CIPS) of China;
 - Executive Committee Member of the **Multilingual Intelligent Information Processing Specialized Committee** of the CAAI;
 - Executive Committee Member of the **NLP Specialized Committee** of the CCF;
 - Member of the **Youth Working Committee** of the CIPS;
 - **Standing Committee Member** and **Executive Committee Member** of the **Ethnic Language and Script Information Specialized Committee** of the CIPS;
 - Member of the **Machine Translation Specialized Committee** of the CIPS;
 - Member of the **NLG and Intelligent Writing Specialized Committee** of the CIPS;
- Domestic Academic Services
 - **Sponsorship Chair** of CCMT 2024 by the Chinese Information Processing Society of China;
- International Conferences:
 - **Reviewer:** ACL2016, ACL2023-2024, EACL2024, NAACL2019, NAACL2024, EMNLP2024, AAI2018, COLING2018, COLING2025, ACM MM2024, IJCNN2022, NLP2024, PACLIC2021, NLP2022, MLIP2022-2023, DMS2023, IEEE CAI2024, Fuzzy2024
 - **Technical Program Committee member:** AISS2023-2024, AICCC2023, CMCM2024, IEEE MLNLP2024
- International Journals (Reviewer) :
 - International Journal of Intelligent Systems (IJIS) 2021-2022, ACM Transactions on Asian and Low-Resource Language Information Processing (TALLIP) 2022-2023
- Reports at Major International and Domestic Academic Conferences
 - CIKM 2022, Poster Presentation, Online, 2022.10
 - NAACL 2022, Poster Presentation, Online, 2022.06
 - EMNLP 2021, **main conference oral presentation**, Online, 2021.11
 - ICIS 2018, **main conference oral presentation**, 北京大学, 2018.10
 - ICCSIP 2018, **main conference oral presentation**, 北京大学, 2018.11
 - The 16th National Symposium on Minority Language and Script Information Processing, Guilin, China, Sept. 2017
- Academic Exchange Reports at Domestic Universities & Enterprises
 - “Unsupervised Domain Adaptation for Low-Resource Language NMT”, Peking University, Beijing, 2018.09
 - “Tsinghua University Doctoral Forum”, Oral Presentation, Tsinghua University, Beijing, 2019.3
 - “Improving the Performance of Low-Resource Language NMT Models Between Morphologically Rich Languages”, Shenzhen Xinyi Technology, Shenzhen, 2019.6

- “NMT for Low-Resource Languages”, Minzu University of China, Beijing,, 2019.11.12
- “Experiences from EMNLP2021 at Alibaba DAMO Academy”, Hangzhou, Zhejiang, 2021.8
- “A Brief Discussion on the Progress of Low-Resource Language Machine Translation in the Era of Large Models”, Yili Normal University, Xinjiang, 2023.11

Professional Skills

- Natural Language Processing: Machine Translation (related technologies), Language Models (pre-training), Information Retrieval, Text Generation, and Textual Inference
- Deep Learning: Network Architectures (RNN (GRU & LSTM), CNN), Libraries/Tools (TensorFlow, PyTorch)
- Machine Learning: Models, Strategies, Algorithms, Supervised Learning, Statistical Learning, Unsupervised Learning
- Speech Signal Processing: Speech Recognition, Speech Synthesis, Spoken Language Translation
- Computer Programming: Fundamentals, Web Development, Programming Design (C, C++, C#, Java, Python (Machine Learning & Deep Learning tools)), Databases, MVC Architecture, Smart Mobile Devices
- Other Skills: Graphic Design, Project Management, Organizational Skills

Development Experience

- Team Development
 - Windows Mobile Product Management System, C#, 2009
 - Large-scale Training School Information Management Platform, C#, 2012
 - Uyghur Speech Synthesis SMS Reader, Android, 2013
 - Uyghur GIS System, VB, 2013
 - Uyghur-Chinese Statistical Machine Translation System Based on Moses and Microsoft Translator Hub, C++/JavaScript/HTML, 2014
 - Chinese Voice Input Method, Java & Android, 2014
 - Uyghur-Chinese Bidirectional Spoken Language Translation System, C++ & Android, 2014
- Independent Development
 - Library Information Management Platform, C#, 2009
 - University Examination Management System, C#, 2009
 - University Dormitory Information Management Platform, C#, 2010
 - University Examination Invigilation Scheduling System, C#, 2011
 - Chinese Learning Platform Based on Android, Java & Android, 2012
 - Multilingual (Uyghur, Kazakh, Kyrgyz, Mongolian, Tibetan) Online Information Collection and Processing Platform, C# & ASP.NET, 2013
 - Uyghur Multi-Script Text Conversion System, C#, 2013
 - Uyghur Stem Extraction and Part-of-Speech Tagging Preprocessing Tool, C++ & C#, 2014
 - Uyghur Automatic Part-of-Speech Tagging Tool, C++ & C#, 2014
 - Uyghur Automatic Stem Extraction Tool, C++ & C#, 2015
 - Uyghur, Mongolian, Tibetan - Chinese Bidirectional Statistical Machine Translation System, Python/JavaScript/HTML, 2016
 - Uyghur - Chinese Bidirectional Neural Machine Translation System, Python/TensorFlow/C++/JavaScript/HTML, 2016
 - Cross-Language Information Retrieval System, JavaScript/HTML, 2017
 - Low-Resource Language Neural Machine Translation System, Python/TensorFlow/JavaScript/HTML, 2018
 - Multilingual Neural Machine Translation System, Python/TensorFlow/JavaScript/HTML, 2019

Honors

Outstanding student cadre of XJU	2007 – 2008
Excellent league member of XJU	2008 – 2009
National Encouragement Scholarship	2008 – 2009
National Encouragement Scholarship	2009 – 2010
Advanced Individual in Social Practice Intern of XJU	2010.10
Second prize in the program design competition of XJU	2011.06
National Scholarship (Undergraduate)	2010 – 2011
Outstanding Student	2010 – 2011
Outstanding Graduates (Undergraduate)	2012.06
Second-class scholarship for postgraduate	2012 – 2015
National Scholarship (Postgraduate)	2014 – 2015
Third-class Social Practice Scholarship for Postgraduates of THU	2016.12
Second Prize of Science and Technology of Chinese Institute of Electronics	2022.01

♥ Hobbies

- Reading - **Psychology**, science fiction, linguistics, and technology-related books
- Movies - **Martial arts** (action, crime), drama, science fiction, and American TV series, **never watch romantic movies**
- Sports - **Fitness, swimming**, billiards, hiking, skiing, soccer, badminton (rarely play), and outdoor activities
- Travel - Scenic spots, **ancient architecture**, and museums
- Food - **Low-fat meals, steak**, Xinjiang cuisine (hand-pulled lamb & pilaf), buffet, **do not like hot pot**

🖼️ Records of Academic Presentations at International Conferences



EMNLP 2021
Main Conference



NAACL 2022
Main Conference



ICIS 2018
Sub-conference



ICCSP 2018
Sub-conference

Figure 1: Presenting Relevant Research Findings at International Conferences

Tsinghua University, 2019
Doctoral Forum

Minzu University of China, 2019
Research Paper sharing



Peking University, 2018
Center for Excellence in
E-Course Development



Xinjiang University, 2017
Sharing of Machine Learning
Methods

— 报告题目 —

浅谈大模型时代下低资源机器翻译研究进展

米尔阿迪力江·麦麦提

研究助理



报告时间: 2023年11月22日

17:00 - 18:00

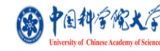
腾讯会议ID: 241 677 533

✓ 报告人介绍

米尔阿迪力江·麦麦提, 硕士, 中科院新疆理化技术研究所助理研究员, 曾负责新疆巴图尔乌拉图翻译研究中心项目, 主持新疆维吾尔自治区、新疆维吾尔自治区商务厅新疆机器翻译委员会项目、中国计算机学会自然语言处理专委会会员会会员以及中国中文信息学会自然语言专委会会员。研究方向为自然语言处理、机器翻译以及中文语料处理。同时, 作为负责人和核心成员参与了多个国家自然科学基金项目、国际会议论文、中文专利。此外, 还作为负责人或主要成员参与了新疆维吾尔自治区科技厅项目——新疆维吾尔自治区语言资源库建设及共享平台的低资源机器翻译研究项目。曾担任新疆维吾尔自治区会议和《DIEP, NACL, CNA, CNA, ACM TALLP, IS, 757》上发表了 20 余篇论文。目前担任多个国际会议和期刊 ACL, EACL, NAACL, COLING, NAACL, DNN, ACM TALLP 的审稿人和程序委员会成员。

✓ 摘要

近年来, 以 ChatGPT 和 GPT-4 为代表的低资源语言翻译(简称大模型)展现了强大的机器翻译能力, 对机器翻译研究产生了深远影响, 也挑战了传统的人工翻译和一般性低资源文本。大模型在机器翻译领域具有许多优势, 吸引了人们广泛关注。然而, 大模型在资源受限的条件下仍然面临诸多挑战。首先, 大模型在机器翻译任务上普遍需要大量数据, 这给数据获取和标注带来了挑战。其次, 大模型在机器翻译任务上普遍需要大量算力, 这给模型训练和推理带来了挑战。最后, 大模型在机器翻译任务上普遍需要大量内存, 这给模型训练和推理带来了挑战。因此, 如何在大模型在资源受限的条件下实现高质量的机器翻译, 是一个值得研究的课题。本报告将介绍大模型在机器翻译领域的研究进展, 并探讨大模型在低资源机器翻译任务上的挑战。最后, 本报告将介绍大模型在低资源机器翻译任务上的研究进展, 并探讨大模型在低资源机器翻译任务上的研究进展。



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浅谈大模型时代下低资源 机器翻译研究进展

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Figure 2: Sharing Research Findings and Investigative Explorations at Domestic Higher Education Institutions

System Demonstration



Figure 3: Demonstrated the Self-Developed Uyghur Command Word Recognition (Voice Control) System to Chairman Yu Zhengsheng

Representative Demo



Figure 4: Tsinghua University Low-Resource Multilingual Translation System (Resource Scared Languages)