# Mieradilijiang Maimaiti

# **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

#### Xinjiang University (XJU)

2025.04 - Present

Assistant Professor (Tenure-Track)

School of Computer Science

- Base: Urumqi, Xinjiang, China
- Project: Towards Multimodal Large Language Model Translation for Low-Resource Languages along the Belt and Road Initiative
- Contribution: This project adopts an unsupervised approach enhanced by cross-lingual semantic retrieval
  to generate high-quality pseudo-data with reduced syntactic and semantic errors. It further explores the application of multi-modal large language models in understanding and generating local and official languages
  along the Belt and Road, and investigates multi-tool collaboration to improve performance in low-resource
  machine translation tasks.

#### Chinese Academy of Sciences (Xinjiang Branch)

2023.04 - 2025.04

Research Assistant

Laboratory of Multilingual Information Technology

- Base: Urumqi, Xinjiang, China
- Project: Exploring Machine Translation Technologies Using Large Language Models for Low-Resource Cross-Lingual Applications
- Contribution: This study introduces a code-switching strategy into cross-lingual semantic retrieval models
  for low-resource languages and integrates regularization mechanisms into multilingual pretrained models,
  significantly improving cross-lingual semantic alignment. In addition, it systematically explores efficient supervised fine-tuning approaches for large language models under resource-constrained conditions, offering
  improved adaptation for low-resource tasks.

#### 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: Led the algorithm design and optimization of the end-to-end intelligent service system for DARAZ, and spearheaded the multilingual expansion of the AliExpress merchant-side intelligent assistant.
   In cross-border customer service tasks, successfully enabled AliExpress merchant support for emerging Central Asian languages. The intent recognition model for Lazada achieved over a 4% improvement in offline performance in Central Asia, while the FAQ retrieval and intent classification models for DARAZ

saw performance gains of 13 points offline and an average of 9 points online in South Asia, significantly enhancing response accuracy and user experience in intelligent interaction systems.

#### 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: During the internship, completed all assigned tasks with high quality and proposed a languageagnostic hybrid romanization strategy, effectively addressing multilingual challenges on South Asian ecommerce platforms such as DARAZ. The integration of this strategy significantly improved the resolution
  rate of online intelligent customer service, promoting the practical deployment of algorithms in real-world
  business scenarios.

# Beijing Silk Road Heli Investment Management Group Co.,Ltd

2019.07 - 2019.12

Information Services Department

СТО

• Base: Beijing, China

- Project: Multi-Lingual E-commerce Platform
- Contribution: Focused primarily on the system architecture and core module development of cross-lingual
  and cross-context e-commerce platforms along the Belt and Road regions, leading technical solutions
  and providing architectural guidance. Also responsible for system design and technical management for
  online education and media platforms, covering architecture construction, feature implementation, and team
  coordination.

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

- 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: Primarily involved in the development of a bidirectional neural machine translation system between Uyghur and Chinese, further extending the work to multilingual neural machine translation tasks in Belt and Road language scenarios, thereby providing core technical support for cross-lingual intelligent services.

\* **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: Took charge of data preparation and preprocessing, conducted model training, and participated in the front-end development of the system.

#### \* 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: Led the development of neural machine translation systems tailored for low-resource language scenarios.

\* **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: Primarily responsible for the development of a cross-lingual information retrieval system, including building web crawlers targeting Uyghur, Tibetan, and Mongolian languages to collect multilingual corpus resources. Additionally, integrating a self-developed low-resource language machine translation interface to achieve cross-lingual retrieval and semantic alignment across heterogeneous multilingual sources.

\* **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: Primarily responsible for training and optimizing sentiment classification models for minority language texts.

#### \* 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: Served primarily as a technical consultant for the development of the Uyghur-Chinese bidirectional machine translation engine, responsible for designing key technical solutions and overseeing the system architecture, as well as providing code implementation and optimization support for core modules.

#### - 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: Responsible for the full development and deployment of the Android system, while also building and optimizing Uyghur slot grammar files for the speech recognition module to improve the recognition accuracy and language adaptability of the voice interaction system.

\* **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: Independently developed a Uyghur language stemming preprocessing tool, a manual part-of-speech (POS) tagging platform, a POS tagging review platform, and an automated system for stemming and POS tagging.

\* **NSFC** 2012.01 – 2015.01

"Software Development for Export to Central and Western Asia"

· Level: National

· Mentor: Academician Wushouer Silamu

· Status: Completed

· Contributions: Responsible for language proofreading, text content statistics, and organization for the Arabic version of Windows 7, ensuring the accuracy and consistency of the system localization content.

\* NSFC 2011.01 – 2014.01

"Research on Uyghur Handwriting Identification"

· Level: National

· Mentor: Academician Wushouer Silamu

· Status: Completed

· Contributions: Responsible for developing core module functionalities using C++, and participating in system functional testing and performance optimization to ensure the stability and efficient operation of the software system.

#### Selected Papers

- Mieradilijiang Maimaiti\*, Yuanhang Zheng\*, Ji Zhang, Yue Zhang, Wenpei Luo, Kaiyu Huang, "Improving Multi-lingual Representation for Semantic Retrieval with Code-switching", In Knowledge-Based Systems (KBS), 2025 (SCI Q1 Top)
- 2. **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, **2022** (SCI Q1)
- 3. **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)
- 4. **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 **Top**)
- 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)
- 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)
- 7. **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 (ICCSSP), volume 1006, p3-16, 2019 (EI)
- 8. **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)
- 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 Q3), **co-first author**
- 10. Wenshen Xu\*, **Mieradilijiang Maimaiti**\*, Yuanhang Zheng, Xin Tang, and Ji Zhang<sup>†</sup>, "Auto-MLM: Improved Contrastive Learning for Self-supervised Multi-lingual Knowledge Retrieval", In Arxiv 2024, **cofirst author**
- 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 Unsupervised 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, "Rethinking Human-Like Translation Strategy: Integrating Drift-Diffusion Model with Large Language Models", In Arxiv 2024, **Corresponding author**
- 17. Dawulie Jinensibieke\*, **Mieradilijiang Maimaiti**<sup>†</sup>, Wentao Xiao\*, Yuanhang Zheng, and Xiaobo Wang<sup>†</sup>, "How Good are LLMs at Relation Extraction under Low-Resource Scenario? Comprehensive Evaluation", In Arxiv2024, **Corresponding author**
- 18. **Mieradilijiang Maimaiti**, Wushouer Silamu, Nuermaimaiti 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)
- 19. **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)
- 20. **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)
- 21. 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**
- 22. 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**
- 23. 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)
- 24. Xiaobing Zhao, Lu Gao, Dingguo Gao, Wugedele Bao, **Mieradilijiang Maimaiti**, Yang Liu ,Zhijie Cai, and Yuan Sun\*, "Minority Languages Word Segmentation Technology Evaluation Dataset MLWS2021", In China Scientific Data, 2022.
- 25. 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;
- \* Mieradilijiang Maimaiti, Yifei Li, Yating Yang, Xi Zhou, "A Method for Machine Translation on Low-Resource Languages using Active Learning", Computer Patent for Invention; China Patent Application No: 202411782239.9;

#### 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;"

#### m 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
  - Conference

- \* Sponsorship Chair of CCMT 2024 by the Chinese Information Processing Society of China;
- \* Track Co-Chair of the Low-Resource Languages Information Processing Forum at CCMT 2025
- National Research Projects
  - \* Remote Reviewer for the National Natural Science Foundation of China (NSFC)
- International Conferences:
  - Reviewer: ACL2016, ACL2023-2024, EACL2024, NAACL2019, NAACL2024, EMNLP2024, AAAI2018, COLING2018, COLING2025, ACM MM2024, IJCNN2022, NLP2024, PACLIC2021, NLPAI2022, MLIP2022-2025, DMS2023, IEEE CAI2024, Fuzzy2024
  - Area Chair (AC): IJCNN2025
  - Technical Program Committee (TPC) 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, International Journal of Computer Science Review (JCSR) 2024
- 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
  - "The Power of Al for General Applications in Medicine", Westlake University, Hangzhou, Zhejiang, 2025.04
  - "Exploring the Necessity of Tool Learning in the Era of Large Models", School of Changji, Urumqi, Xinjiang, 2024.10
  - "A Brief Discussion on the Progress of Low-Resource Language Machine Translation in the Era of Large Models", Yili Normal University, Yili, Xinjiang, 2023.11
  - "Experiences from EMNLP2021 at Alibaba DAMO Academy", Hangzhou, Zhejiang, 2021.8
  - "NMT for Low-Resource Languages", Minzu University of China, Beijing, 2019.11.12
  - "Improving the Performance of Low-Resource Language NMT Models Between Morphologically Rich Languages", Shenzhen Xinyi Technology, Shenzhen, 2019.6
  - "Tsinghua University Doctoral Forum", Oral Presentation, Tsinghua University, Beijing, 2019.3
  - "Unsupervised Domain Adaptation for Low-Resource Language NMT", Peking University, Beijing, 2018.09

#### 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 SMT, Python/JavaScript/HTML, 2016
  - Uyghur Chinese Bidirectional NMT System, Python/TensorFlow/C++/JavaScript/HTML, 2016
  - Cross-Language Information Retrieval System, JavaScript/HTML, 2017
  - Low-Resource Languages NMT 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



Figure 1: Presenting Relevant Research Findings at International Conferences

#### Records of Academic Presentations at Domestic Universities



Figure 2: Sharing Research Findings and Investigative Explorations at Domestic Higher Education Institutions1

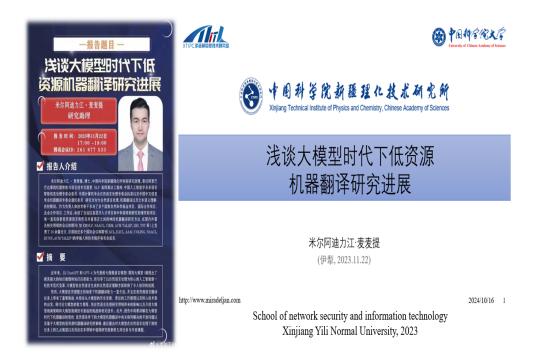
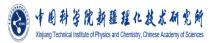


Figure 3: Sharing Research Findings and Investigative Explorations at Domestic Higher Education Institutions2



Figure 4: Sharing Research Findings and Investigative Explorations at Domestic Higher Education Institutions3





# The Power of AI for General Applications in Medicine

Mieradilijiang Maimaiti (2025.04.03, Hangzhou)

Weastlake University, 2025 School of Engineering

Figure 5: Sharing Research Findings and Investigative Explorations at Domestic Higher Education Institutions4

# System Demonstration 1



Figure 6: Demonstrated the Self-Developed Uyghur Command Word Recognition (Voice Control) System to Chairman Yu Zhengsheng

System Demonstration 2

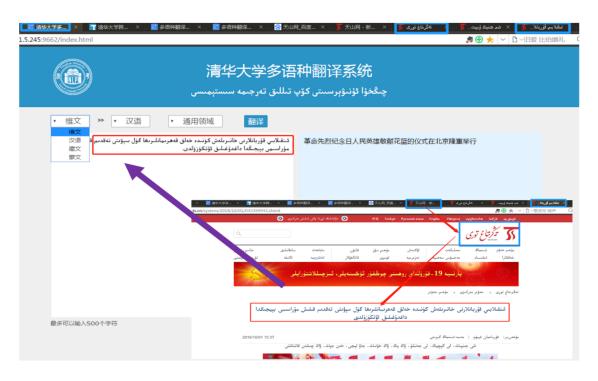


Figure 7: Tsinghua University Low-Resource Multilingual Translation System (Resource Scared Languages)