MT Summit 2023



Proceedings of Machine Translation Summit XIX Vol. 1: Research Track

September 4 - 8, 2023

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Introduction

The research track at MT Summit 2023 has a wide range of topics with 33 papers selected from entire 50 submissions. The part of subjects covered by the research track, as indicated by the keywords in the titles below:

- Low-Resource, Zero-resource MT
- Document-Level, Coherent, Context-aware NMT
- Quality Estimation
- Multi-domain, Domain Robustness, Domain Adaptation
- Unsupervised NMT
- Robust NMT, Markup Translation
- MT Evaluation
- Annotation
- Poetry, Compounds, Dialectal
- Post-editing
- Sign Language, Multimodal

Among the 33 papers, 19 papers are accepted as oral presentations and 14 as poster presentations. The most popular subject is "Low-Resource" MT. The subjects of "Context-aware" NMT and "Quality Estimation" are also popular. We also have unique topics like Myanmar Sign Language, Translation with Markup, Robust NMT, Dialectal Arabic-Turkish MT, and Poetry Translation. These indicate we have both popular topics and unique topics, which could be overlooked in the larger general NLP conferences.

We thank the authors, reviewers, and MT Summit organizing committee for making a good conference happen. We also thank our invited speakers for the research track for sharing their interesting experiences: Min Zhang, Ondřej Bojar, Mitesh Khapra, Tong Xiao, and Isao Goto.

Sincerely, Masao Utiyama and Rui Wang (Research Track Co-Chairs)

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Negative Lexical Constraints in Neural Machine Translation Josef Jon, Dusan Varis, Michal Novák, João Paulo Aires and Ondřej Bojar
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Conference Program

Wednesday, 6th September

11:15–12:15 Session RP1: Research Track Posters (1)

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Joint Dropout: Improving Generalizability in Low-Resource Neural Machine Translation through Phrase Pair Variables Ali Araabi, Vlad Niculae and Christof Monz

A Study of Multilingual versus Meta-Learning for Language Model Pre-Training for Adaptation to Unseen Low Resource Languages Jyotsana Khatri, Rudra Murthy, Amar Prakash Azad and Pushpak Bhattacharyya

Data Augmentation with Diversified Rephrasing for Low-Resource Neural Machine Translation Yuan Gao, Feng Hou, Huia Jahnke and Ruili Wang

A Dual Reinforcement Method for Data Augmentation using Middle Sentences for Machine Translation Wenyi TANG and Yves Lepage

16:00–17:30 Session RS1: Quality Estimation

Perturbation-based QE: An Explainable, Unsupervised Word-level Quality Estimation Method for Blackbox Machine Translation Tu Anh Dinh and Jan Niehues

Semi-supervised Learning for Quality Estimation of Machine Translation Tarun Bhatia, Martin Kraemer, Eduardo Vellasques and Eleftherios Avramidis

Learning from Past Mistakes: Quality Estimation from Monolingual Corpora and Machine Translation Learning Stages Thierry Etchegoyhen and David Ponce

Thursday, 7th September

10:30–12:00 Session RS2: Transfer Learning Approach

Exploring Domain-shared and Domain-specific Knowledge in Multi-Domain Neural Machine Translation Zhibo Man, YUJIE ZHANG, Yuanmeng Chen, Yufeng Chen and Jinan Xu

Enhancing Translation of Myanmar Sign Language by Transfer Learning and Self-Training

Hlaing Myat Nwe, Kiyoaki Shirai, Natthawut Kertkeidkachorn, Thanaruk Theeramunkong, Ye Kyaw Thu, Thepchai Supnithi and Natsuda Kaothanthong

Improving Embedding Transfer for Low-Resource Machine Translation Van Hien Tran, Chenchen Ding, Hideki Tanaka and Masao Utiyama

10:30–12:00 Session RS3: Training with Auxiliary Information

Boosting Unsupervised Machine Translation with Pseudo-Parallel Data Ivana Kvapilíková and Ondřej Bojar

A Study on the Effectiveness of Large Language Models for Translation with Markup Raj Dabre, Bianka Buschbeck, Miriam Exel and Hideki Tanaka

A Case Study on Context Encoding in Multi-Encoder based Document-Level Neural Machine Translation

Ramakrishna Appicharla, Baban Gain, Santanu Pal and Asif Ekbal

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15:00–16:00 Session RP2: Research Track Posters (2)

In-context Learning as Maintaining Coherency: A Study of On-the-fly Machine Translation Using Large Language Models Suzanna Sia and Kevin Duh

Beyond Correlation: Making Sense of the Score Differences of New MT Evaluation Metrics

Chi-kiu Lo, Rebecca Knowles and Cyril Goutte

Bad MT Systems are Good for Quality Estimation Iryna Tryhubyshyn, Aleš Tamchyna and Ondřej Bojar

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Instance-Based Domain Adaptation for Improving Terminology Translation Prashanth Nayak, John Kelleher, rejwanul haque and Andy Way

16:00–17:30 Session RS4: Feedback and Evaluation

Learning from Mistakes: Towards Robust Neural Machine Translation for Disfluent L2 Sentences Shuyue Stella Li and Philipp Koehn

The Role of Compounds in Human vs. Machine Translation Quality Kristyna Neumannova and Ondřej Bojar

Benchmarking Dialectal Arabic-Turkish Machine Translation Hasan Alkheder, Houda Bouamor, Nizar Habash and Ahmet Zengin

Friday, 8th September

10:30–12:00 Session RS5: Context-aware Machine Translation

Context-aware Neural Machine Translation for English-Japanese Business Scene Dialogues Sumire Honda Patrick Fernandes and Chrysoula Zerva

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A Context-Aware Annotation Framework for Customer Support Live Chat Machine Translation

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Targeted Data Augmentation Improves Context-aware Neural Machine Translation Harritxu Gete, Thierry Etchegoyhen and Gorka Labaka

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Target Language Monolingual Translation Memory based NMT by Cross-lingual Retrieval of Similar Translations and Reranking Takuya Tamura, Xiaotian Wang, Takehito Utsuro and Masaaki Nagata

Towards Zero-Shot Multilingual Poetry Translation Wai Lei Song, Haoyun Xu, Derek F. Wong, Runzhe Zhan, Lidia S. Chao and Shanshan Wang

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Pivot Translation for Zero-resource Language Pairs Based on a Multilingual Pretrained Model

Kenji Imamura, Masao Utiyama and Eiichiro Sumita

Friday, 8th September (continued)

16:00–17:00 Session RP3: Research Track Posters (3)

Character-level NMT and language similarity Josef Jon and Ondřej Bojar

Negative Lexical Constraints in Neural Machine Translation Josef Jon, Dusan Varis, Michal Novák, João Paulo Aires and Ondřej Bojar

Post-editing of Technical Terms based on Bilingual Example Sentences Elsie K. Y. Chan, John Lee, Chester Cheng and Benjamin Tsou

A Filtering Approach to Object Region Detection in Multimodal Machine Translation Ali Hatami, Paul Buitelaar and Mihael Arcan