

Machine Translation Summit 2023

Volume 1: Research Track

Macau, China
4-8 September 2023

ISBN: 978-1-7138-9040-9

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2023) by the authors.
All rights reserved.

These articles are licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).

Printed with permission by Curran Associates, Inc. (2024)

For permission requests, please contact the Association for Computational Linguistics at the address below.

Association for Computational Linguistics
209 N. Eighth Street
Stroudsburg, Pennsylvania 18360

Phone: 1-570-476-8006
Fax: 1-570-476-0860

acl@aclweb.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

Table of Contents

<i>Multiloop Incremental Bootstrapping for Low-Resource Machine Translation</i> Wuying Liu, Wei Li and Lin Wang	1
<i>Joint Dropout: Improving Generalizability in Low-Resource Neural Machine Translation through Phrase Pair Variables</i> Ali Araabi, Vlad Niculae and Christof Monz	12
<i>A Study of Multilingual versus Meta-Learning for Language Model Pre-Training for Adaptation to Unseen Low Resource Languages</i> Jyotsana Khatri, Rudra Murthy, Amar Prakash Azad and Pushpak Bhattacharyya	26
<i>Data Augmentation with Diversified Rephrasing for Low-Resource Neural Machine Translation</i> Yuan Gao, Feng Hou, Huia Jahnke and Ruili Wang	35
<i>A Dual Reinforcement Method for Data Augmentation using Middle Sentences for Machine Translation</i> Wenyi TANG and Yves Lepage	48
<i>Perturbation-based QE: An Explainable, Unsupervised Word-level Quality Estimation Method for Black-box Machine Translation</i> Tu Anh Dinh and Jan Niehues	59
<i>Semi-supervised Learning for Quality Estimation of Machine Translation</i> Tarun Bhatia, Martin Kraemer, Eduardo Vellasques and Eleftherios Avramidis	72
<i>Learning from Past Mistakes: Quality Estimation from Monolingual Corpora and Machine Translation Learning Stages</i> Thierry Etchegoyhen and David Ponce	84
<i>Exploring Domain-shared and Domain-specific Knowledge in Multi-Domain Neural Machine Translation</i> Zhibo Man, YUIE ZHANG, Yuanmeng Chen, Yufeng Chen and Jinan Xu	99
<i>Enhancing Translation of Myanmar Sign Language by Transfer Learning and Self-Training</i> Hlaing Myat Nwe, Kiyooki Shirai, Natthawut Kertkeidkachorn, Thanaruk Theeramunkong, Ye Kyaw Thu, Thepchai Supnithi and Natsuda Kaothanthong	111
<i>Improving Embedding Transfer for Low-Resource Machine Translation</i> Van Hien Tran, Chenchen Ding, Hideki Tanaka and Masao Utiyama	123
<i>Boosting Unsupervised Machine Translation with Pseudo-Parallel Data</i> Ivana Kvapilíková and Ondřej Bojar	135
<i>A Study on the Effectiveness of Large Language Models for Translation with Markup</i> Raj Dabre, Bianka Buschbeck, Miriam Exel and Hideki Tanaka	148
<i>A Case Study on Context Encoding in Multi-Encoder based Document-Level Neural Machine Translation</i> Ramakrishna Appicharla, Baban Gain, Santanu Pal and Asif Ekbal	160
<i>In-context Learning as Maintaining Coherency: A Study of On-the-fly Machine Translation Using Large Language Models</i> Suzanna Sia and Kevin Duh	173

<i>Beyond Correlation: Making Sense of the Score Differences of New MT Evaluation Metrics</i> Chi-kiu Lo, Rebecca Knowles and Cyril Goutte	186
<i>Bad MT Systems are Good for Quality Estimation</i> Iryna Tryhubyshyn, Aleš Tamchyna and Ondřej Bojar	200
<i>Improving Domain Robustness in Neural Machine Translation with Fused Topic Knowledge Embeddings</i> Danai Xezonaki, Talaat Khalil, David Stap and Brandon Denis	209
<i>Instance-Based Domain Adaptation for Improving Terminology Translation</i> Prashanth Nayak, John Kelleher, rejwanul haque and Andy Way	222
<i>Learning from Mistakes: Towards Robust Neural Machine Translation for Disfluent L2 Sentences</i> Shuyue Stella Li and Philipp Koehn	235
<i>The Role of Compounds in Human vs. Machine Translation Quality</i> Kristyna Neumannova and Ondřej Bojar	248
<i>Benchmarking Dialectal Arabic-Turkish Machine Translation</i> Hasan Alkheder, Houda Bouamor, Nizar Habash and Ahmet Zengin	261
<i>Context-aware Neural Machine Translation for English-Japanese Business Scene Dialogues</i> Sumire Honda, Patrick Fernandes and Chrysoula Zerva	272
<i>A Context-Aware Annotation Framework for Customer Support Live Chat Machine Translation</i> Miguel Menezes, M. Amin Farajian, Helena Moniz and João Varelãs Graça	286
<i>Targeted Data Augmentation Improves Context-aware Neural Machine Translation</i> Harritxu Gete, Thierry Etchegoyhen and Gorika Labaka	298
<i>Target Language Monolingual Translation Memory based NMT by Cross-lingual Retrieval of Similar Translations and Reranking</i> Takuya Tamura, Xiaotian Wang, Takehito Utsuro and Masaaki Nagata	313
<i>Towards Zero-Shot Multilingual Poetry Translation</i> Wai Lei Song, Haoyun Xu, Derek F. Wong, Runzhe Zhan, Lidia S. Chao and Shanshan Wang ..	324
<i>Leveraging Highly Accurate Word Alignment for Low Resource Translation by Pretrained Multilingual Model</i> Jingyi Zhu, Minato Kondo, Takuya Tamura, Takehito Utsuro and Masaaki Nagata	336
<i>Pivot Translation for Zero-resource Language Pairs Based on a Multilingual Pretrained Model</i> Kenji Imamura, Masao Utiyama and Eiichiro Sumita	348
<i>Character-level NMT and language similarity</i> Josef Jon and Ondřej Bojar	360
<i>Negative Lexical Constraints in Neural Machine Translation</i> Josef Jon, Dusan Varis, Michal Novák, João Paulo Aires and Ondřej Bojar	372
<i>Post-editing of Technical Terms based on Bilingual Example Sentences</i> Elsie K. Y. Chan, John Lee, Chester Cheng and Benjamin Tsou	385
<i>A Filtering Approach to Object Region Detection in Multimodal Machine Translation</i> Ali Hatami, Paul Buitelaar and Mihael Arcan	393