Machine Translation Summit XVIII

Volume 1: MT Research Track

Online 16 – 20 August 2021

Editors:

Kevin Duh Francisco Guzman Stephen Richardson

ISBN: 978-1-7138-3919-4

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© (2021) by the Association for Computational Linguistics All rights reserved. Copyright for individual papers remains with the authors and are licensed under a Creative Commons 4.0 license, CC-BY-ND. (https://creativecommons.org/licenses/by-nd/4.0/)

Printed with permission by Curran Associates, Inc. (2022)

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

Contents

1 Learning Curricula for Multilingual Neural Machine Translation Training

Gaurav Kumar, Philipp Koehn and Sanjeev Khudanpur

10 Investigating Active Learning in Interactive Neural Machine Translation

Kamal Gupta, Dhanvanth Boppana, Rejwanul Haque, Asif Ekbal and Pushpak Bhattacharyya

23 Crosslingual Embeddings are Essential in UNMT for distant languages: An English to IndoAryan Case Study

Tamali Banerjee, Rudra V Murthy and Pushpak Bhattacharya

35 Neural Machine Translation in Low-Resource Setting: a Case Study in English-Marathi Pair

Aakash Banerjee, Aditya Jain, Shivam Mhaskar, Sourabh Dattatray Deoghare, Aman Sehgal and Pushpak Bhattacharya

48 Transformers for Low-Resource Languages: Is Féidir Linn!

Seamus Lankford, Haithem Alfi and Andy Way

61 The Effect of Domain and Diacritics in Yoruba--English Neural Machine Translation

David Adelani, Dana Ruiter, Jesujoba Alabi, Damilola Adebonojo, Adesina Ayeni, Mofe Adeyemi, Ayodele Esther Awokoya and Cristina España-Bonet

76 Integrating Unsupervised Data Generation into Self-Supervised Neural Machine Translation for Low-Resource Languages

Dana Ruiter, Dietrich Klakow, Josef van Genabith and Cristina España-Bonet

92 Surprise Language Challenge: Developing a Neural Machine Translation System between Pashto and English in Two Months

Alexandra Birch, Barry Haddow, Antonio Valerio Miceli Barone, Jindrich Helcl, Jonas Waldendorf, Felipe Sánchez Martínez, Mikel Forcada, Víctor Sánchez Cartagena, Juan Antonio Pérez-Ortiz, Miquel Esplà-Gomis, Wilker Aziz, Lina Murady, Sevi Sariisik, Peggy van der Kreeft and Kay Macquarrie

103 Like Chalk and Cheese? On the Effects of Translationese in MT Training

Samuel Larkin, Michel Simard and Rebecca Knowles

114 Investigating Softmax Tempering for Training Neural Machine Translation Models

Raj Dabre and Atsushi Fujita

127 Scrambled Translation Problem: A Problem of Denoising UNMT

Tamali Banerjee, Rudra V Murthy and Pushpak Bhattacharya

139 Make the Blind Translator See The World: A Novel Transfer Learning Solution for Multimodal Machine Translation

Minghan Wang, Jiaxin Guo, Yimeng Chen, Chang Su, Min Zhang, Shimin Tao and Hao Yang

150 Sentiment Preservation in Review Translation using Curriculum-based Re-inforcement Framework

Divya Kumari, Soumya Chennabasavaraj, Nikesh Garera and Asif Ekbal

163 On nature and causes of observed MT errors

Maja Popovic

176 A Comparison of Sentence-Weighting Techniques for NMT

Simon Rieß, Matthias Huck and Alex Fraser

188 Sentiment-based Candidate Selection for NMT

Alexander G Jones and Derry Wijaya

202 Studying The Impact Of Document-level Context On Simultaneous Neural Machine Translation

Raj Dabre, Aizhan Imankulova and Masahiro Kaneko

215 Attainable Text-to-Text Machine Translation vs. Translation: Issues Beyond Linguistic Processing

Atsushi Fujita

231 Modeling Target-side Inflection in Placeholder Translation

Ryokan Ri, Toshiaki Nakazawa and Yoshimasa Tsuruoka

243 Product Review Translation using Phrase Replacement and Attention Guided Noise Augmentation

Kamal Gupta, Soumya Chennabasavaraj, Nikesh Garera and Asif Ekbal

256 Optimizing Word Alignments with Better Subword Tokenization

Anh Khoa Ngo Ho and François Yvon

- 270 Introducing Mouse Actions into Interactive-Predictive Neural Machine Translation Ángel Navarro and Francisco Casacuberta
- 282 Neural Machine Translation with Inflected Lexicon

Artur Nowakowski and Krzysztof Jassem

293 An Alignment-Based Approach to Semi-Supervised Bilingual Lexicon Induction with Small Parallel Corpora

Kelly V Marchisio, Philipp Koehn and Conghao Xiong