

WMT 2022

**Seventh Conference on Machine Translation**

**Proceedings of the Conference**

December 7-8, 2022

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ISBN 978-1-959429-29-6

## Introduction

The Seventh Conference on Machine Translation (WMT 2022) took place on Wednesday, December 7 and Thursday, December 8, 2022 immediately preceding the 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP 2022).

This is the seventh time WMT has been held as a conference. The first time WMT was held as a conference was at ACL 2016 in Berlin, Germany, the second time at EMNLP 2017 in Copenhagen, Denmark, the third time at EMNLP 2018 in Brussels, Belgium, the fourth time at ACL 2019 in Florence, Italy, the fifth time at EMNLP-2020, which was held as an online event due to the COVID-19 pandemic, and the sixth time at EMNLP 2021 at Punta Cana, Dominican Republic. Prior to being a conference, WMT was held 10 times as a workshop. WMT was held for the first time at HLT-NAACL 2006 in New York City, USA. In the following years the Workshop on Statistical Machine Translation was held at ACL 2007 in Prague, Czech Republic, ACL 2008, Columbus, Ohio, USA, EACL 2009 in Athens, Greece, ACL 2010 in Uppsala, Sweden, EMNLP 2011 in Edinburgh, Scotland, NAACL 2012 in Montreal, Canada, ACL 2013 in Sofia, Bulgaria, ACL 2014 in Baltimore, USA, EMNLP 2015 in Lisbon, Portugal.

The focus of our conference is to bring together researchers from the area of machine translation and invite selected research papers to be presented at the conference.

Prior to the conference, in addition to soliciting relevant papers for review and possible presentation, we conducted 13 shared tasks: General Machine Translation of News, Similar Language Translation, Biomedical Translation, Large-Scale Machine Translation Evaluation for African Languages, Translation Efficiency, Sign Language Translation, Code-mixed Machine Translation, Chat Translation Task, Unsupervised MT and Very Low Resource Supervised Machine Translation, Metrics for Machine Translation, Quality Estimation of Translation, Word-Level Auto-Completion, Translation Suggestion, and the Automatic Post-Editing task.

The results of all shared tasks were announced at the conference, and these proceedings also include overview papers for the shared tasks, summarizing the results, as well as providing information about the data used and any procedures that were followed in conducting or scoring the tasks. In addition, there are short papers from each participating team that describe their underlying system in greater detail.

Like in previous years, we have received a far larger number of submissions than we could accept for presentation. WMT 2022 has received 48 full research paper submissions (not counting withdrawn submissions). In total, WMT 2022 featured 16 full research paper presentations and 96 shared task presentations.

The invited talk entitled was given by Ondřej Bojar from Charles University, Prague, Czech Republic

We would like to thank the members of the Program Committee for their timely reviews. We also would like to thank the participants of the shared task and all the other volunteers who helped with the evaluations.

Loïc Barrault, Rachel Bawden, Ondřej Bojar, Fethi Bougares, Rajen Chatterjee, Marta R. Costa-jussà, Anton Dvorkovich, Christian Federmann, Mark Fishel, Alexander Fraser, Markus Freitag, Yvette Graham, Roman Grundkiewicz, Paco Guzman, Barry Haddow, Matthias Huck, Antonio Jimeno Yepes, Rebecca Knowles, Tom Kocmi, Philipp Koehn, André Martins, Christof Monz, Makoto Morishita, Masaaki Nagata, Toshiaki Nakazawa, Matteo Negri, Aurélie Névéol, Mariana Neves, Martin Popel, Matt Post, Mariya Shmatova, Marco Turchi, and Marcos Zampieri

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# Keynote Talk: Speech Translation — When Two Superhuman Technologies Combined Fail

Ondřej Bojar  
Charles University

**Abstract:** In my talk, I will describe the challenges we faced in the EU project ELITR when we put together low-latency speech recognition and machine translation, both 'at or above human levels of performance' in order to simultaneously translate spontaneous speech to 42 languages. I will have to talk about various aspects of quality and I will delve into both source and target multilinguality. Our ongoing quest is to put human interpreters on the same scales as machines, to contrast their virtues, complement them in their service and build upon their output.

**Bio:** Ondřej Bojar is an associate professor at ÚFAL, Charles University, and a lead scientist in Machine Translation in the Czech Republic. He has been co-organizing WMT shared tasks in machine translation and machine translation evaluation since 2013. His system has dominated English-Czech translation in the years 2013-2015, before deep learning and neural networks fundamentally changed the field. Having taken part and later supervised ÚFAL's participation in a series of EU projects (EuroMatrix, EuroMatrixPlus, MosesCore, QT21, HimL, CRACKER, Bergamot), he has recently concluded his coordination of the EU project ELITR (<http://elitr.eu/>) focussed on simultaneous speech translation into over 40 languages. ELITR has also coined the task of project meeting summarization with its AutoMin 2021 shared task.

## Table of Contents

### *Findings of the 2022 Conference on Machine Translation (WMT22)*

Tom Kocmi, Rachel Bawden, Ondřej Bojar, Anton Dvorkovich, Christian Federmann, Mark Fishel, Thamme Gowda, Yvette Graham, Roman Grundkiewicz, Barry Haddow, Rebecca Knowles, Philipp Koehn, Christof Monz, Makoto Morishita, Masaaki Nagata, Toshiaki Nakazawa, Michal Novák, Martin Popel and Maja Popović ..... 1

### *Results of WMT22 Metrics Shared Task: Stop Using BLEU – Neural Metrics Are Better and More Robust*

Markus Freitag, Ricardo Rei, Nitika Mathur, Chi-kiu Lo, Craig Stewart, Eleftherios Avramidis, Tom Kocmi, George Foster, Alon Lavie and André F. T. Martins ..... 46

### *Findings of the WMT 2022 Shared Task on Quality Estimation*

Chrysoula Zerva, Frédéric Blain, Ricardo Rei, Piyawat Lertvittayakumjorn, José G. C. De Souza, Steffen Eger, Diptesh Kanojia, Duarte Alves, Constantin Orăsan, Marina Fomicheva, André F. T. Martins and Lucia Specia ..... 69

### *Findings of the WMT 2022 Shared Task on Efficient Translation*

Kenneth Heafield, Biao Zhang, Graeme Nail, Jelmer Van Der Linde and Nikolay Bogoychev 100

### *Findings of the WMT 2022 Shared Task on Automatic Post-Editing*

Pushpak Bhattacharyya, Rajen Chatterjee, Markus Freitag, Diptesh Kanojia, Matteo Negri and Marco Turchi ..... 109

### *Embarrassingly Easy Document-Level MT Metrics: How to Convert Any Pretrained Metric into a Document-Level Metric*

Giorgos Vernikos, Brian Thompson, Prashant Mathur and Marcello Federico ..... 118

### *Searching for a Higher Power in the Human Evaluation of MT*

Johnny Wei, Tom Kocmi and Christian Federmann ..... 129

### *Test Set Sampling Affects System Rankings: Expanded Human Evaluation of WMT20 English-Inuktitut Systems*

Rebecca Knowles and Chi-kiu Lo ..... 140

### *Continuous Rating as Reliable Human Evaluation of Simultaneous Speech Translation*

Dávid Javorský, Dominik Macháček and Ondřej Bojar ..... 154

### *Gender Bias Mitigation for NMT Involving Genderless Languages*

Ander Corral and Xabier Saralegi ..... 165

### *Exploring the Benefits and Limitations of Multilinguality for Non-autoregressive Machine Translation*

Sweta Agrawal, Julia Kreutzer and Colin Cherry ..... 177

### *Learning an Artificial Language for Knowledge-Sharing in Multilingual Translation*

Danni Liu and Jan Niehues ..... 188

### *Don't Discard Fixed-Window Audio Segmentation in Speech-to-Text Translation*

Chantal Amrhein and Barry Haddow ..... 203

### *Additive Interventions Yield Robust Multi-Domain Machine Translation Models*

Elijah Rippeth and Matt Post ..... 220

<i>Inria-ALMAnaCH at WMT 2022: Does Transcription Help Cross-Script Machine Translation?</i> Jesujoba Alabi, Lydia Nishimwe, Benjamin Muller, Camille Rey, Benoît Sagot and Rachel Bawden .....	233
<i>NAIST-NICT-TIT WMT22 General MT Task Submission</i> Hiroyuki Deguchi, Kenji Imamura, Masahiro Kaneko, Yuto Nishida, Yusuke Sakai, Justin Vasselli, Huy Hien Vu and Taro Watanabe .....	244
<i>Samsung R&amp;D Institute Poland Participation in WMT 2022</i> Adam Dobrowolski, Mateusz Klimaszewski, Adam Myśliwy, Marcin Szymański, Jakub Kowalski, Kornelia Szypuła, Paweł Przewłocki and Paweł Przybysz .....	251
<i>Tencent AI Lab - Shanghai Jiao Tong University Low-Resource Translation System for the WMT22 Translation Task</i> Zhiwei He, Xing Wang, Zhaopeng Tu, Shuming Shi and Rui Wang .....	260
<i>Lan-Bridge MT's Participation in the WMT 2022 General Translation Shared Task</i> Bing Han, Yangjian Wu, Gang Hu and Qiulin Chen .....	268
<i>Manifold's English-Chinese System at WMT22 General MT Task</i> Chang Jin, Tingxun Shi, Zhengshan Xue and Xiaodong Lin .....	275
<i>CUNI-Bergamot Submission at WMT22 General Translation Task</i> Josef Jon, Martin Popel and Ondřej Bojar .....	280
<i>KYB General Machine Translation Systems for WMT22</i> Shivam Kalkar, Yoko Matsuzaki and Ben Li .....	290
<i>Analyzing the Use of Influence Functions for Instance-Specific Data Filtering in Neural Machine Translation</i> Tsz Kin Lam, Eva Hasler and Felix Hieber .....	295
<i>The AISP-SJTU Translation System for WMT 2022</i> Guangfeng Liu, Qinpei Zhu, Xingyu Chen, Renjie Feng, Jianxin Ren, Renshou Wu, Qingliang Miao, Rui Wang and Kai Yu .....	310
<i>NT5 at WMT 2022 General Translation Task</i> Makoto Morishita, Keito Kudo, Yui Oka, Katsuki Chousa, Shun Kiyono, Sho Takase and Jun Suzuki .....	318
<i>Adam Mickiewicz University at WMT 2022: NER-Assisted and Quality-Aware Neural Machine Translation</i> Artur Nowakowski, Gabriela Pałka, Kamil Guttman and Mikołaj Pokrywka .....	326
<i>Evaluating Corpus Cleanup Methods in the WMT'22 News Translation Task</i> Marilena Malli and George Tambouratzis .....	335
<i>PROMT Systems for WMT22 General Translation Task</i> Alexander Molchanov, Vladislav Kovalenko and Natalia Makhamalkina .....	342
<i>eTranslation's Submissions to the WMT22 General Machine Translation Task</i> Csaba Oravecz, Katina Bontcheva, David Kolovratnik, Bogomil Kovachev and Christopher Scott	346
<i>CUNI Systems for the WMT 22 Czech-Ukrainian Translation Task</i> Martin Popel, Jindřich Libovický and Jindřich Helcl .....	352

<i>The ARC-NKUA Submission for the English-Ukrainian General Machine Translation Shared Task at WMT22</i>	
Dimitrios Roussis and Vassilis Papavassiliou . . . . .	358
<i>The NiuTrans Machine Translation Systems for WMT22</i>	
Weiqiao Shan, Zhiquan Cao, Yuchen Han, Siming Wu, Yimin Hu, Jie Wang, Yi Zhang, Hou Baoyu, Hang Cao, Chenghao Gao, Xiaowen Liu, Tong Xiao, Anxiang Ma and Jingbo Zhu . . . . .	366
<i>Teaching Unseen Low-resource Languages to Large Translation Models</i>	
Maali Tars, Taido Purason and Andre Tättar . . . . .	375
<i>Can Domains Be Transferred across Languages in Multi-Domain Multilingual Neural Machine Translation?</i>	
Thuy-trang Vu, Shahram Khadivi, Xuanli He, Dinh Phung and Gholamreza Haffari . . . . .	381
<i>DUTNLP Machine Translation System for WMT22 General MT Task</i>	
Ting Wang, Huan Liu, Junpeng Liu and Degen Huang . . . . .	397
<i>HW-TSC's Submissions to the WMT 2022 General Machine Translation Shared Task</i>	
Daimeng Wei, Zhiqiang Rao, Zhanglin Wu, Shaojun Li, Yuanchang Luo, Yuhao Xie, Xiaoyu Chen, Hengchao Shang, Zongyao Li, Zhengzhe Yu, Jinlong Yang, Miaomiao Ma, Lizhi Lei, Hao Yang and Ying Qin . . . . .	403
<i>Vega-MT: The JD Explore Academy Machine Translation System for WMT22</i>	
Changtong Zan, Keqin Peng, Liang Ding, Baopu Qiu, Boan Liu, Shwai He, Qingyu Lu, Zheng Zhang, Chuang Liu, Weifeng Liu, Yibing Zhan and Dacheng Tao . . . . .	411
<i>No Domain Left behind</i>	
Hui Zeng . . . . .	423
<i>GTCOM Neural Machine Translation Systems for WMT22</i>	
Hao Zong and Chao Bei . . . . .	428
<i>Linguistically Motivated Evaluation of the 2022 State-of-the-art Machine Translation Systems for Three Language Directions</i>	
Vivien Macketanz, Shushen Manakhimova, Eleftherios Avramidis, Ekaterina Lapshinova-koltunski, Sergei Bagdasarov and Sebastian Möller . . . . .	432
<i>Automated Evaluation Metric for Terminology Consistency in MT</i>	
Kirill Semenov and Ondřej Bojar . . . . .	450
<i>Test Suite Evaluation: Morphological Challenges and Pronoun Translation</i>	
Marion Weller-di Marco and Alexander Fraser . . . . .	458
<i>Robust MT Evaluation with Sentence-level Multilingual Augmentation</i>	
Duarte Alves, Ricardo Rei, Ana C Farinha, José G. C. De Souza and André F. T. Martins . . . . .	469
<i>ACES: Translation Accuracy Challenge Sets for Evaluating Machine Translation Metrics</i>	
Chantal Amrhein, Nikita Moghe and Liane Guillou . . . . .	479
<i>Linguistically Motivated Evaluation of Machine Translation Metrics Based on a Challenge Set</i>	
Eleftherios Avramidis and Vivien Macketanz . . . . .	514
<i>Exploring Robustness of Machine Translation Metrics: A Study of Twenty-Two Automatic Metrics in the WMT22 Metric Task</i>	
Xiaoyu Chen, Daimeng Wei, Hengchao Shang, Zongyao Li, Zhanglin Wu, Zhengzhe Yu, Ting Zhu, Mengli Zhu, Ning Xie, Lizhi Lei, Shimin Tao, Hao Yang and Ying Qin . . . . .	530

<i>MS-COMET: More and Better Human Judgements Improve Metric Performance</i> Tom Kocmi, Hitokazu Matsushita and Christian Federmann .....	541
<i>Partial Could Be Better than Whole. HW-TSC 2022 Submission for the Metrics Shared Task</i> Yilun Liu, Xiaosong Qiao, Zhanglin Wu, Su Chang, Min Zhang, Yanqing Zhao, Song Peng, Shimin Tao, Hao Yang, Ying Qin, Jiaxin Guo, Minghan Wang, Yinglu Li, Peng Li and Xiaofeng Zhao	549
<i>Unsupervised Embedding-based Metric for MT Evaluation with Improved Human Correlation</i> Ananya Mukherjee and Manish Shrivastava .....	558
<i>REUSE: REference-free UnSupervised Quality Estimation Metric</i> Ananya Mukherjee and Manish Shrivastava .....	564
<i>MaTESe: Machine Translation Evaluation as a Sequence Tagging Problem</i> Stefano Perrella, Lorenzo Proietti, Alessandro Scirè, Niccolò Campolungo and Roberto Navigli	569
<i>COMET-22: Unbabel-IST 2022 Submission for the Metrics Shared Task</i> Ricardo Rei, José G. C. De Souza, Duarte Alves, Chrysoula Zerva, Ana C Farinha, Taisiya Glushkova, Alon Lavie, Luisa Coheur and André F. T. Martins .....	578
<i>Alibaba-Translate China's Submission for WMT2022 Metrics Shared Task</i> Yu Wan, Keqin Bao, Dayiheng Liu, Baosong Yang, Derek F. Wong, Lidia S. Chao, Wenqiang Lei and Jun Xie .....	586
<i>Quality Estimation via Backtranslation at the WMT 2022 Quality Estimation Task</i> Sweta Agrawal, Nikita Mehandru, Niloufar Salehi and Marine Carpuat .....	593
<i>Alibaba-Translate China's Submission for WMT 2022 Quality Estimation Shared Task</i> Keqin Bao, Yu Wan, Dayiheng Liu, Baosong Yang, Wenqiang Lei, Xiangnan He, Derek F. Wong and Jun Xie .....	597
<i>KU X Upstage's Submission for the WMT22 Quality Estimation: Critical Error Detection Shared Task</i> Sugyeong Eo, Chanjun Park, Hyeonseok Moon, Jaehyung Seo and Heuseok Lim .....	606
<i>NJUNLP's Participation for the WMT2022 Quality Estimation Shared Task</i> Xiang Geng, Yu Zhang, Shujian Huang, Shimin Tao, Hao Yang and Jiajun Chen .....	615
<i>BJTU-Toshiba's Submission to WMT22 Quality Estimation Shared Task</i> Hui Huang, Hui Di, Chunyou Li, Hanming Wu, Kazushige Ouchi, Yufeng Chen, Jian Liu and Jinan Xu .....	621
<i>Papago's Submission to the WMT22 Quality Estimation Shared Task</i> Seunghyun Lim and Jeonghyeok Park .....	627
<i>CometKiwi: IST-Unbabel 2022 Submission for the Quality Estimation Shared Task</i> Ricardo Rei, Marcos Treviso, Nuno M. Guerreiro, Chrysoula Zerva, Ana C Farinha, Christine Maroti, José G. C. De Souza, Taisiya Glushkova, Duarte Alves, Luisa Coheur, Alon Lavie and André F. T. Martins .....	634
<i>CrossQE: HW-TSC 2022 Submission for the Quality Estimation Shared Task</i> Shimin Tao, Su Chang, Ma Miaomiao, Hao Yang, Xiang Geng, Shujian Huang, Min Zhang, Jiaxin Guo, Minghan Wang and Yinglu Li .....	646
<i>Welocalize-ARC/NKUA's Submission to the WMT 2022 Quality Estimation Shared Task</i> Eirini Zafeiridou and Sokratis Sofianopoulos .....	653

<i>Edinburgh's Submission to the WMT 2022 Efficiency Task</i>	
Nikolay Bogoychev, Maximiliana Behnke, Jelmer Van Der Linde, Graeme Nail, Kenneth Heafield, Biao Zhang and Sidharth Kashyap . . . . .	661
<i>CUNI Non-Autoregressive System for the WMT 22 Efficient Translation Shared Task</i>	
Jindřich Helcl . . . . .	668
<i>The RoyalFlush System for the WMT 2022 Efficiency Task</i>	
Bo Qin, Aixin Jia, Qiang Wang, Jianning Lu, Shuqin Pan, Haibo Wang and Ming Chen . . . . .	671
<i>HW-TSC's Submission for the WMT22 Efficiency Task</i>	
Hengchao Shang, Ting Hu, Daimeng Wei, Zongyao Li, Xianzhi Yu, Jianfei Feng, Ting Zhu, Lizhi Lei, Shimin Tao, Hao Yang, Ying Qin, Jinlong Yang, Zhiqiang Rao and Zhengzhe Yu . . . . .	677
<i>IIT Bombay's WMT22 Automatic Post-Editing Shared Task Submission</i>	
Sourabh Deoghare and Pushpak Bhattacharyya . . . . .	682
<i>LUL's WMT22 Automatic Post-Editing Shared Task Submission</i>	
Xiaoying Huang, Xingrui Lou, Fan Zhang and Tu Mei . . . . .	689
<i>Findings of the WMT 2022 Biomedical Translation Shared Task: Monolingual Clinical Case Reports</i>	
Mariana Neves, Antonio Jimeno Yepes, Amy Siu, Roland Roller, Philippe Thomas, Maika Vicente Navarro, Lana Yeganova, Dina Wiemann, Giorgio Maria Di Nunzio, Federica Vezzani, Christel Gerardin, Rachel Bawden, Darryl Johan Estrada, Salvador Lima-lopez, Eulalia Farre-maduel, Martin Krallinger, Cristian Grozea and Aurelie Neveol . . . . .	694
<i>Findings of the WMT 2022 Shared Task on Chat Translation</i>	
Ana C Farinha, M. Amin Farajian, Marianna Buchicchio, Patrick Fernandes, José G. C. De Souza, Helena Moniz and André F. T. Martins . . . . .	724
<i>Findings of the First WMT Shared Task on Sign Language Translation (WMT-SLT22)</i>	
Mathias Müller, Sarah Ebling, Eleftherios Avramidis, Alessia Battisti, Michèle Berger, Richard Bowden, Annelies Braffort, Necati Cihan Camgöz, Cristina España-bonet, Roman Grundkiewicz, Zifan Jiang, Oscar Koller, Amit Moryossef, Regula Perrollaz, Sabine Reinhard, Annette Rios, Dimitar Shterionov, Sandra Sidler-miserez and Katja Tissi . . . . .	744
<i>Findings of the WMT'22 Shared Task on Large-Scale Machine Translation Evaluation for African Languages</i>	
David Adelani, Md Mahfuz Ibn Alam, Antonios Anastasopoulos, Akshita Bhagia, Marta R. Costajussà, Jesse Dodge, Fahim Faisal, Christian Federmann, Natalia Fedorova, Francisco Guzmán, Sergey Koshelev, Jean Maillard, Vukosi Marivate, Jonathan Mbuya, Alexandre Mourachko, Safiyyah Saleem, Holger Schwenk and Guillaume Wenzek . . . . .	773
<i>Findings of the WMT 2022 Shared Tasks in Unsupervised MT and Very Low Resource Supervised MT</i>	
Marion Weller-di Marco and Alexander Fraser . . . . .	801
<i>Overview and Results of MixMT Shared-Task at WMT 2022</i>	
Vivek Srivastava and Mayank Singh . . . . .	806
<i>Findings of the Word-Level AutoCompletion Shared Task in WMT 2022</i>	
Francisco Casacuberta, George Foster, Guoping Huang, Philipp Koehn, Geza Kovacs, Lemao Liu, Shuming Shi, Taro Watanabe and Chengqing Zong . . . . .	812
<i>Findings of the WMT 2022 Shared Task on Translation Suggestion</i>	
Zhen Yang, Fandong Meng, Yingxue Zhang, Ernan Li and Jie Zhou . . . . .	821

<i>Focused Concatenation for Context-Aware Neural Machine Translation</i> Lorenzo Lupo, Marco Dinarelli and Laurent Besacier .....	830
<i>Does Sentence Segmentation Matter for Machine Translation?</i> Rachel Wicks and Matt Post .....	843
<i>Revisiting Locality Sensitive Hashing for Vocabulary Selection in Fast Neural Machine Translation</i> Hieu Hoang, Marcin Junczys-dowmunt, Roman Grundkiewicz and Huda Khayrallah .....	855
<i>Too Brittle to Touch: Comparing the Stability of Quantization and Distillation towards Developing Low-Resource MT Models</i> Harshita Diddee, Sandipan Dandapat, Monojit Choudhury, Tanuja Ganu and Kalika Bali .....	870
<i>Data Augmentation for Inline Tag-Aware Neural Machine Translation</i> Yonghyun Ryu, Yoonjung Choi and Sangha Kim .....	886
<i>The SPECTRANS System Description for the WMT22 Biomedical Task</i> Nicolas Ballier, Jean-baptiste Yunès, Guillaume Wisniewski, Lichao Zhu and Maria Zimina .....	895
<i>SRT's Neural Machine Translation System for WMT22 Biomedical Translation Task</i> Yoonjung Choi, Jiho Shin, Yonghyun Ryu and Sangha Kim .....	901
<i>Examining Large Pre-Trained Language Models for Machine Translation: What You Don't Know about It</i> Lifeng Han, Gleb Erofeev, Irina Sorokina, Serge Gladkoff and Goran Nenadic .....	908
<i>Summer: WeChat Neural Machine Translation Systems for the WMT22 Biomedical Translation Task</i> Ernan Li, Fandong Meng and Jie Zhou .....	920
<i>Optum's Submission to WMT22 Biomedical Translation Tasks</i> Sahil Manchanda and Saurabh Bhagwat .....	925
<i>Huawei BabelTar NMT at WMT22 Biomedical Translation Task: How We Further Improve Domain-specific NMT</i> Weixuan Wang, Xupeng Meng, Suqing Yan, Ye Tian and Wei Peng .....	930
<i>HW-TSC Translation Systems for the WMT22 Biomedical Translation Task</i> Zhanglin Wu, Jinlong Yang, Zhiqiang Rao, Zhengzhe Yu, Daimeng Wei, Xiaoyu Chen, Zongyao Li, Hengchao Shang, Shaojun Li, Ming Zhu, Yuanchang Luo, Yuhao Xie, Miaomiao Ma, Ting Zhu, Lizhi Lei, Song Peng, Hao Yang and Ying Qin .....	936
<i>Unbabel-IST at the WMT Chat Translation Shared Task</i> João Alves, Pedro Henrique Martins, José G. C. De Souza, M. Amin Farajian and André F. T. Martins .....	943
<i>Investigating Effectiveness of Multi-Encoder for Conversational Neural Machine Translation</i> Baban Gain, Ramakrishna Appicharla, Soumya Chennabasavaraj, Nikesh Garera, Asif Ekbal and Muthusamy Chelliah .....	949
<i>BJTU-WeChat's Systems for the WMT22 Chat Translation Task</i> Yunlong Liang, Fandong Meng, Jinan Xu, Yufeng Chen and Jie Zhou .....	955
<i>HW-TSC Translation Systems for the WMT22 Chat Translation Task</i> Jinlong Yang, Zongyao Li, Daimeng Wei, Hengchao Shang, Xiaoyu Chen, Zhengzhe Yu, Zhiqiang Rao, Shaojun Li, Zhanglin Wu, Yuhao Xie, Yuanchang Luo, Ting Zhu, Yanqing Zhao, Lizhi Lei, Hao Yang and Ying Qin .....	962

<i>Clean Text and Full-Body Transformer: Microsoft’s Submission to the WMT22 Shared Task on Sign Language Translation</i>	
Subhadeep Dey, Abhilash Pal, Cyrine Chaabani and Oscar Koller . . . . .	969
<i>Spatio-temporal Sign Language Representation and Translation</i>	
Yasser Hamidullah, Josef Van Genabith and Cristina España-bonet . . . . .	977
<i>Experimental Machine Translation of the Swiss German Sign Language via 3D Augmentation of Body Keypoints</i>	
Lorenz Hufe and Eleftherios Avramidis . . . . .	983
<i>TTIC’s WMT-SLT 22 Sign Language Translation System</i>	
Bowen Shi, Diane Brentari, Gregory Shakhnarovich and Karen Livescu . . . . .	989
<i>Tackling Low-Resourced Sign Language Translation: UPC at WMT-SLT 22</i>	
Laia Tarres, Gerard I. Gállego, Xavier Giro-i-nieto and Jordi Torres . . . . .	994
<i>Separating Grains from the Chaff: Using Data Filtering to Improve Multilingual Translation for Low-Resourced African Languages</i>	
Idris Abdulmumin, Michael Beukman, Jesujoba Alabi, Chris Chinenye Emezue, Everlyn Chimoto, Tosin Adewumi, Shamsuddeen Muhammad, Mofetoluwa Adeyemi, Oreen Yousuf, Sahib Singh and Tajuddeen Gwadabe . . . . .	1001
<i>Language Adapters for Large-Scale MT: The GMU System for the WMT 2022 Large-Scale Machine Translation Evaluation for African Languages Shared Task</i>	
Md Mahfuz Ibn Alam and Antonios Anastasopoulos . . . . .	1015
<i>Samsung Research Philippines - Datasaur AI’s Submission for the WMT22 Large Scale Multilingual Translation Task</i>	
Jan Christian Blaise Cruz and Lintang Sutawika . . . . .	1034
<i>University of Cape Town’s WMT22 System: Multilingual Machine Translation for Southern African Languages</i>	
Khalid Elmadani, Francois Meyer and Jan Buys . . . . .	1039
<i>Tencent’s Multilingual Machine Translation System for WMT22 Large-Scale African Languages</i>	
Wenxiang Jiao, Zhaopeng Tu, Jiarui Li, Wenxuan Wang, Jen-tse Huang and Shuming Shi . .	1049
<i>DENTRA: Denoising and Translation Pre-training for Multilingual Machine Translation</i>	
Samta Kamboj, Sunil Kumar Sahu and Neha Sengupta . . . . .	1057
<i>The VolcTrans System for WMT22 Multilingual Machine Translation Task</i>	
Xian Qian, Kai Hu, Jiaqiang Wang, Yifeng Liu, Xingyuan Pan, Jun Cao and Mingxuan Wang	1068
<i>WebCrawl African : A Multilingual Parallel Corpora for African Languages</i>	
Pavanpankaj Vegi, Sivabhavani J, Biswajit Paul, Abhinav Mishra, Prashant Banjare, Prasanna K R and Chitra Viswanathan . . . . .	1076
<i>ANVITA-African: A Multilingual Neural Machine Translation System for African Languages</i>	
Pavanpankaj Vegi, Sivabhavani J, Biswajit Paul, Prasanna K R and Chitra Viswanathan . . .	1090
<i>HW-TSC Systems for WMT22 Very Low Resource Supervised MT Task</i>	
Shaojun Li, Yuanchang Luo, Daimeng Wei, Zongyao Li, Hengchao Shang, Xiaoyu Chen, Zhan-glin Wu, Jinlong Yang, Zhiqiang Rao, Zhengzhe Yu, Yuhao Xie, Lizhi Lei, Hao Yang and Ying Qin	1098

<i>Unsupervised and Very-Low Resource Supervised Translation on German and Sorbian Variant Languages</i>	
Rahul Tangsali, Aditya Vyawahare, Aditya Mandke, Onkar Litake and Dipali Kadam . . . . .	1104
<i>MUNI-NLP Systems for Lower Sorbian-German and Lower Sorbian-Upper Sorbian Machine Translation @ WMT22</i>	
Edoardo Signoroni and Pavel Rychlý . . . . .	1111
<i>The AIC System for the WMT 2022 Unsupervised MT and Very Low Resource Supervised MT Task</i>	
Ahmad Shapiro, Mahmoud Salama, Omar Abdelhakim, Mohamed Fayed, Ayman Khalafallah and Noha Adly . . . . .	1117
<i>NICT at MixMT 2022: Synthetic Code-Mixed Pre-training and Multi-way Fine-tuning for Hinglish-English Translation</i>	
Raj Dabre . . . . .	1122
<i>Gui at MixMT 2022 : English-Hinglish : An MT Approach for Translation of Code Mixed Data</i>	
Akshat Gahoi, Jayant Duneja, Anshul Padhi, Shivam Mangale, Saransh Rajput, Tanvi Kamble, Dipti Sharma and Vasudev Varma . . . . .	1126
<i>MUCS@MixMT: IndicTrans-based Machine Translation for Hinglish Text</i>	
Asha Hegde and Shashirekha Lakshmaiah . . . . .	1131
<i>SIT at MixMT 2022: Fluent Translation Built on Giant Pre-trained Models</i>	
Abdul Khan, Hrishikesh Kanade, Girish Budhrani, Preet Jhanglani and Jia Xu . . . . .	1136
<i>The University of Edinburgh’s Submission to the WMT22 Code-Mixing Shared Task (MixMT)</i>	
Faheem Kirefu, Vivek Iyer, Pinzhen Chen and Laurie Burchell . . . . .	1145
<i>CNLP-NITS-PP at MixMT 2022: Hinglish-English Code-Mixed Machine Translation</i>	
Sahinur Rahman Laskar, Rahul Singh, Shyambabu Pandey, Riyanka Manna, Partha Pakray and Sivaji Bandyopadhyay . . . . .	1158
<i>Domain Curricula for Code-Switched MT at MixMT 2022</i>	
Lekan Raheem, Maab Elrashid, Melvin Johnson and Julia Kreutzer . . . . .	1162
<i>Lingua Custodia’s Participation at the WMT 2022 Word-Level Auto-completion Shared Task</i>	
Melissa Ailem, Jingshu Liu, Jean-gabriel Barthelemy and Raheel Qader . . . . .	1170
<i>Translation Word-Level Auto-Completion: What Can We Achieve Out of the Box?</i>	
Yasmin Moslem, Rejwanul Haque and Andy Way . . . . .	1176
<i>PRHLT’s Submission to WLAC 2022</i>	
Angel Navarro, Miguel Domingo and Francisco Casacuberta . . . . .	1182
<i>IIGROUP Submissions for WMT22 Word-Level AutoCompletion Task</i>	
Cheng Yang, Siheng Li, Chufan Shi and Yujiu Yang . . . . .	1187
<i>HW-TSC’s Submissions to the WMT22 Word-Level Auto Completion Task</i>	
Hao Yang, Hengchao Shang, Zongyao Li, Daimeng Wei, Xianghui He, Xiaoyu Chen, Zhengzhe Yu, Jiaxin Guo, Jinlong Yang, Shaojun Li, Yuanchang Luo, Yuhao Xie, Lizhi Lei and Ying Qin . .	1192
<i>TSMind: Alibaba and Soochow University’s Submission to the WMT22 Translation Suggestion Task</i>	
Xin Ge, Ke Wang, Jiayi Wang, Nini Xiao, Xiangyu Duan, Yu Zhao and Yuqi Zhang . . . . .	1198
<i>Transn’s Submissions to the WMT22 Translation Suggestion Task</i>	
Mao Hongbao, Zhang Wenbo, Cai Jie and Cheng Jianwei . . . . .	1205

*Improved Data Augmentation for Translation Suggestion*

Hongxiao Zhang, Siyu Lai, Songming Zhang, Hui Huang, Yufeng Chen, Jinan Xu and Jian Liu  
1211

# Program

Wednesday, December 7, 2022

09:00 - 09:10     *Opening Remarks*

09:10 - 10:30     *Session 1 — Shared Task Overview Papers I*

*Findings of the 2022 Conference on Machine Translation (WMT22)*

Tom Kocmi, Rachel Bawden, Ondřej Bojar, Anton Dvorkovich, Christian Federmann, Mark Fishel, Thamme Gowda, Yvette Graham, Roman Grundkiewicz, Barry Haddow, Rebecca Knowles, Philipp Koehn, Christof Monz, Makoto Morishita, Masaaki Nagata, Toshiaki Nakazawa, Michal Novák, Martin Popel and Maja Popović

*Results of WMT22 Metrics Shared Task: Stop Using BLEU – Neural Metrics Are Better and More Robust*

Markus Freitag, Ricardo Rei, Nitika Mathur, Chi-kiu Lo, Craig Stewart, Eleftherios Avramidis, Tom Kocmi, George Foster, Alon Lavie and André F. T. Martins

*Findings of the WMT 2022 Shared Task on Quality Estimation*

Chrysoula Zerva, Frédéric Blain, Ricardo Rei, Piyawat Lertvittayakumjorn, José G. C. De Souza, Steffen Eger, Diptesh Kanojia, Duarte Alves, Constantin Orăsan, Marina Fomicheva, André F. T. Martins and Lucia Specia

*Findings of the WMT 2022 Shared Task on Efficient Translation*

Kenneth Heafield, Biao Zhang, Graeme Nail, Jelmer Van Der Linde and Nikolay Bogoychev

*Findings of the WMT 2022 Shared Task on Automatic Post-Editing*

Pushpak Bhattacharyya, Rajen Chatterjee, Markus Freitag, Diptesh Kanojia, Matteo Negri and Marco Turchi

10:30 - 11:00     *Coffee Break*

11:00 - 12:40     *Session 2 — Research Papers on Evaluation and Bias*

*Embarrassingly Easy Document-Level MT Metrics: How to Convert Any Pretrained Metric into a Document-Level Metric*

Giorgos Vernikos, Brian Thompson, Prashant Mathur and Marcello Federico

*Searching for a Higher Power in the Human Evaluation of MT*

Johnny Wei, Tom Kocmi and Christian Federmann

*Analyzing the Use of Influence Functions for Instance-Specific Data Filtering in Neural Machine Translation*

Tsz Kin Lam, Eva Hasler and Felix Hieber

**Wednesday, December 7, 2022 (continued)**

*Continuous Rating as Reliable Human Evaluation of Simultaneous Speech Translation*

Dávid Javorský, Dominik Macháček and Ondřej Bojar

*Gender Bias Mitigation for NMT Involving Genderless Languages*

Ander Corral and Xabier Saralegi

12:40 - 14:00 *Lunch Break*

14:00 - 15:20 *Session 3 — Research Papers on Multilingual, Multimodal, Multidomain Translation*

*Exploring the Benefits and Limitations of Multilinguality for Non-autoregressive Machine Translation*

Sweta Agrawal, Julia Kreutzer and Colin Cherry

*Learning an Artificial Language for Knowledge-Sharing in Multilingual Translation*

Danni Liu and Jan Niehues

*Don't Discard Fixed-Window Audio Segmentation in Speech-to-Text Translation*

Chantal Amrhein and Barry Haddow

*Additive Interventions Yield Robust Multi-Domain Machine Translation Models*

Elijah Rippeth and Matt Post

*Test Set Sampling Affects System Rankings: Expanded Human Evaluation of WMT20 English-Inuktitut Systems*

Rebecca Knowles and Chi-kiu Lo

*Can Domains Be Transferred across Languages in Multi-Domain Multilingual Neural Machine Translation?*

Thuy-trang Vu, Shahram Khadivi, Xuanli He, Dinh Phung and Gholamreza Haffari

15:20 - 16:00 *Coffee Break*

16:00 - 17:30 *Session 4 — Shared Task System Description Posters I*

**Wednesday, December 7, 2022 (continued)**

16:00 - 17:30     *News Translation Task*

*Inria-ALMAAnaCH at WMT 2022: Does Transcription Help Cross-Script Machine Translation?*

Jesujoba Alabi, Lydia Nishimwe, Benjamin Muller, Camille Rey, Benoît Sagot and Rachel Bawden

*NAIST-NICT-TIT WMT22 General MT Task Submission*

Hiroyuki Deguchi, Kenji Imamura, Masahiro Kaneko, Yuto Nishida, Yusuke Sakai, Justin Vasselli, Huy Hien Vu and Taro Watanabe

*Samsung R&D Institute Poland Participation in WMT 2022*

Adam Dobrowolski, Mateusz Klimaszewski, Adam Myśliwy, Marcin Szymański, Jakub Kowalski, Kornelia Szypuła, Paweł Przewłocki and Paweł Przybysz

*Tencent AI Lab - Shanghai Jiao Tong University Low-Resource Translation System for the WMT22 Translation Task*

Zhiwei He, Xing Wang, Zhaopeng Tu, Shuming Shi and Rui Wang

*Lan-Bridge MT's Participation in the WMT 2022 General Translation Shared Task*

Bing Han, Yangjian Wu, Gang Hu and Qiulin Chen

*Manifold's English-Chinese System at WMT22 General MT Task*

Chang Jin, Tingxun Shi, Zhengshan Xue and Xiaodong Lin

*CUNI-Bergamot Submission at WMT22 General Translation Task*

Josef Jon, Martin Popel and Ondřej Bojar

*KYB General Machine Translation Systems for WMT22*

Shivam Kalkar, Yoko Matsuzaki and Ben Li

*The AISP-SJTU Translation System for WMT 2022*

Guangfeng Liu, Qinpei Zhu, Xingyu Chen, Renjie Feng, Jianxin Ren, Renshou Wu, Qingliang Miao, Rui Wang and Kai Yu

*NT5 at WMT 2022 General Translation Task*

Makoto Morishita, Keito Kudo, Yui Oka, Katsuki Chousa, Shun Kiyono, Sho Takase and Jun Suzuki

Wednesday, December 7, 2022 (continued)

*Adam Mickiewicz University at WMT 2022: NER-Assisted and Quality-Aware Neural Machine Translation*

Artur Nowakowski, Gabriela Pałka, Kamil Guttman and Mikołaj Pokrywka

*Evaluating Corpus Cleanup Methods in the WMT'22 News Translation Task*

Marilena Malli and George Tambouratzis

*PROMT Systems for WMT22 General Translation Task*

Alexander Molchanov, Vladislav Kovalenko and Natalia Makhamalkina

*eTranslation's Submissions to the WMT22 General Machine Translation Task*

Csaba Oravecz, Katina Bontcheva, David Kolovratnik, Bogomil Kovachev and Christopher Scott

*CUNI Systems for the WMT 22 Czech-Ukrainian Translation Task*

Martin Popel, Jindřich Libovický and Jindřich Helcl

*The ARC-NKUA Submission for the English-Ukrainian General Machine Translation Shared Task at WMT22*

Dimitrios Roussis and Vassilis Papavassiliou

*The NiuTrans Machine Translation Systems for WMT22*

Weiqiao Shan, Zhiquan Cao, Yuchen Han, Siming Wu, Yimin Hu, Jie Wang, Yi Zhang, Hou Baoyu, Hang Cao, Chenghao Gao, Xiaowen Liu, Tong Xiao, Anxiang Ma and Jingbo Zhu

*Teaching Unseen Low-resource Languages to Large Translation Models*

Maali Tars, Taido Purason and Andre Tättar

*DUTNLP Machine Translation System for WMT22 General MT Task*

Ting Wang, Huan Liu, Junpeng Liu and Degen Huang

*HW-TSC's Submissions to the WMT 2022 General Machine Translation Shared Task*

Daimeng Wei, Zhiqiang Rao, Zhanglin Wu, Shaojun Li, Yuanchang Luo, Yuhao Xie, Xiaoyu Chen, Hengchao Shang, Zongyao Li, Zhengzhe Yu, Jinlong Yang, Miaomiao Ma, Lizhi Lei, Hao Yang and Ying Qin

*Vega-MT: The JD Explore Academy Machine Translation System for WMT22*

Changtong Zan, Keqin Peng, Liang Ding, Baopu Qiu, Boan Liu, Shwai He, Qingyu Lu, Zheng Zhang, Chuang Liu, Weifeng Liu, Yibing Zhan and Dacheng Tao

Wednesday, December 7, 2022 (continued)

*No Domain Left behind*

Hui Zeng

*GTCOM Neural Machine Translation Systems for WMT22*

Hao Zong and Chao Bei

16:00 - 17:30

*Test Suites*

*Linguistically Motivated Evaluation of the 2022 State-of-the-art Machine Translation Systems for Three Language Directions*

Vivien Macketanz, Shushen Manakhimova, Eleftherios Avramidis, Ekaterina Lapshinova-koltunski, Sergei Bagdasarov and Sebastian Möller

*Automated Evaluation Metric for Terminology Consistency in MT*

Kirill Semenov and Ondřej Bojar

*Test Suite Evaluation: Morphological Challenges and Pronoun Translation*

Marion Weller-di Marco and Alexander Fraser

16:00 - 17:30

*Metrics Task*

*Robust MT Evaluation with Sentence-level Multilingual Augmentation*

Duarte Alves, Ricardo Rei, Ana C Farinha, José G. C. De Souza and André F. T. Martins

*ACES: Translation Accuracy Challenge Sets for Evaluating Machine Translation Metrics*

Chantal Amrhein, Nikita Moghe and Liane Guillou

*Linguistically Motivated Evaluation of Machine Translation Metrics Based on a Challenge Set*

Eleftherios Avramidis and Vivien Macketanz

*Exploring Robustness of Machine Translation Metrics: A Study of Twenty-Two Automatic Metrics in the WMT22 Metric Task*

Xiaoyu Chen, Daimeng Wei, Hengchao Shang, Zongyao Li, Zhanglin Wu, Zhengzhe Yu, Ting Zhu, Mengli Zhu, Ning Xie, Lizhi Lei, Shimin Tao, Hao Yang and Ying Qin

*MS-COMET: More and Better Human Judgements Improve Metric Performance*

Tom Kocmi, Hitokazu Matsushita and Christian Federmann

Wednesday, December 7, 2022 (continued)

*Partial Could Be Better than Whole. HW-TSC 2022 Submission for the Metrics Shared Task*

Yilun Liu, Xiaosong Qiao, Zhanglin Wu, Su Chang, Min Zhang, Yanqing Zhao, Song Peng, Shimin Tao, Hao Yang, Ying Qin, Jiaxin Guo, Minghan Wang, Yinglu Li, Peng Li and Xiaofeng Zhao

*Unsupervised Embedding-based Metric for MT Evaluation with Improved Human Correlation*

Ananya Mukherjee and Manish Shrivastava

*REUSE: REference-free UnSupervised Quality Estimation Metric*

Ananya Mukherjee and Manish Shrivastava

*MaTESe: Machine Translation Evaluation as a Sequence Tagging Problem*

Stefano Perrella, Lorenzo Proietti, Alessandro Scirè, Niccolò Campolungo and Roberto Navigli

*COMET-22: Unbabel-IST 2022 Submission for the Metrics Shared Task*

Ricardo Rei, José G. C. De Souza, Duarte Alves, Chrysoula Zerva, Ana C Farinha, Taisiya Glushkova, Alon Lavie, Luisa Coheur and André F. T. Martins

*Alibaba-Translate China's Submission for WMT2022 Metrics Shared Task*

Yu Wan, Keqin Bao, Dayiheng Liu, Baosong Yang, Derek F. Wong, Lidia S. Chao, Wenqiang Lei and Jun Xie

16:00 - 17:30

*Quality Estimation Task*

*Quality Estimation via Backtranslation at the WMT 2022 Quality Estimation Task*

Sweta Agrawal, Nikita Mehandru, Niloufar Salehi and Marine Carpuat

*Alibaba-Translate China's Submission for WMT 2022 Quality Estimation Shared Task*

Keqin Bao, Yu Wan, Dayiheng Liu, Baosong Yang, Wenqiang Lei, Xiangnan He, Derek F. Wong and Jun Xie

*KU X Upstage's Submission for the WMT22 Quality Estimation: Critical Error Detection Shared Task*

Sugyeong Eo, Chanjun Park, Hyeonseok Moon, Jaehyung Seo and Heuseok Lim

*NJUNLP's Participation for the WMT2022 Quality Estimation Shared Task*

Xiang Geng, Yu Zhang, Shujian Huang, Shimin Tao, Hao Yang and Jiajun Chen

Wednesday, December 7, 2022 (continued)

*BJTU-Toshiba's Submission to WMT22 Quality Estimation Shared Task*

Hui Huang, Hui Di, Chunyou Li, Hanming Wu, Kazushige Ouchi, Yufeng Chen, Jian Liu and Jinan Xu

*Papago's Submission to the WMT22 Quality Estimation Shared Task*

Seunghyun Lim and Jeonghyeok Park

*CometKiwi: IST-Unbabel 2022 Submission for the Quality Estimation Shared Task*

Ricardo Rei, Marcos Treviso, Nuno M. Guerreiro, Chrysoula Zerva, Ana C Farinha, Christine Maroti, José G. C. De Souza, Taisiya Glushkova, Duarte Alves, Luisa Coheur, Alon Lavie and André F. T. Martins

*CrossQE: HW-TSC 2022 Submission for the Quality Estimation Shared Task*

Shimin Tao, Su Chang, Ma Miaomiao, Hao Yang, Xiang Geng, Shujian Huang, Min Zhang, Jiabin Guo, Minghan Wang and Yinglu Li

*Welocalize-ARC/NKUA's Submission to the WMT 2022 Quality Estimation Shared Task*

Eirini Zafeiridou and Sokratis Sofianopoulos

16:00 - 17:30 *Efficient Translaton Task*

*Edinburgh's Submission to the WMT 2022 Efficiency Task*

Nikolay Bogoychev, Maximiliana Behnke, Jelmer Van Der Linde, Graeme Nail, Kenneth Heafield, Biao Zhang and Sidharth Kashyap

*CUNI Non-Autoregressive System for the WMT 22 Efficient Translation Shared Task*

Jindřich Helcl

*The RoyalFlush System for the WMT 2022 Efficiency Task*

Bo Qin, Aixin Jia, Qiang Wang, Jianning Lu, Shuqin Pan, Haibo Wang and Ming Chen

*HW-TSC's Submission for the WMT22 Efficiency Task*

Hengchao Shang, Ting Hu, Daimeng Wei, Zongyao Li, Xianzhi Yu, Jianfei Feng, Ting Zhu, Lizhi Lei, Shimin Tao, Hao Yang, Ying Qin, Jinlong Yang, Zhiqiang Rao and Zhengzhe Yu

16:00 - 17:30 *Automatic Post-Editing Task*

*IIT Bombay's WMT22 Automatic Post-Editing Shared Task Submission*

Sourabh Deoghare and Pushpak Bhattacharyya

Wednesday, December 7, 2022 (continued)

*LUL's WMT22 Automatic Post-Editing Shared Task Submission*

Xiaoying Huang, Xingrui Lou, Fan Zhang and Tu Mei

16:00 - 17:30

*Papers from the Findings of the EMNLP*

*Translating Hanja Historical Documents to Contemporary Korean and English*

Alice Oh, Kyunghyun Cho, JinYeong Bak, Haneul Yoo, Jiho Jin and Juhee Son

*Data Selection Curriculum for Neural Machine Translation*

Shafiq Joty, Shruti Bhosale, James Cross, Vishrav Chaudhary, Philipp Koehn and Tasnim Mohiuddin

*Bitext Mining Using Distilled Sentence Representations for Low-Resource Languages*

Holger Schwenk, Onur Çelebi and Kevin Heffernan

*m<sup>A</sup> Adapter: Multilingual Multi-Domain Adaptation for Machine Translation with a Meta-Adapter*

Alexander Fraser, Alexandra Chronopoulou and Wen Lai

*What Do Compressed Multilingual Machine Translation Models Forget?*

Laurent Besacier, James Henderson, Caroline Brun, Alexandre Berard, Vassilina Nikoulina and Alireza Mohammadshahi

*Improving HowNet-Based Chinese Word Sense Disambiguation with Translations*

Grzegorz Kondrak, Bradley Hauer and Xiang Zhang

*Finding Memo: Extractive Memorization in Constrained Sequence Generation Tasks*

Arul Menezes and Vikas Raunak

*SALTED: A Framework for SAlient Long-tail Translation Error Detection*

Arul Menezes, Matt Post and Vikas Raunak

*SALTED: A Framework for SAlient Long-tail Translation Error Detection*

Arul Menezes, Matt Post and Vikas Raunak

Wednesday, December 7, 2022 (continued)

*Data Cartography for Low-Resource Neural Machine Translation*

Marine Carpuat and Aquia Richburg

*Improving Zero-Shot Multilingual Translation with Universal Representations and Cross-Mapping*

Yang Feng and Shuhao Gu

*Guiding Neural Machine Translation with Semantic Kernels*

Yuqiang Xie, Luxi Xing, Yunpeng Li, Yubing Ren, Xiangpeng Wei, Yue Hu and Ping Guo

*Does Simultaneous Speech Translation need Simultaneous Models?*

Marco Turchi, Matteo Negri, Marco Gaido and Sara Papi

*Utilizing Language-Image Pretraining for Efficient and Robust Bilingual Word Alignment*

Kangwook Lee, Dimitris Papailiopoulos, Junjie Hu, Yifei Ming, Timothy Ossowski, Shashank Rajput, Jy-yong Sohn and Tuan Dinh

11:00 - 12:40 *Session 6 — Research Papers on Practical Aspects of Machine Translation*

*Focused Concatenation for Context-Aware Neural Machine Translation*

Lorenzo Lupo, Marco Dinarelli and Laurent Besacier

*Does Sentence Segmentation Matter for Machine Translation?*

Rachel Wicks and Matt Post

*Revisiting Locality Sensitive Hashing for Vocabulary Selection in Fast Neural Machine Translation*

Hieu Hoang, Marcin Junczys-dowmunt, Roman Grundkiewicz and Huda Khayrallah

*Too Brittle to Touch: Comparing the Stability of Quantization and Distillation towards Developing Low-Resource MT Models*

Harshita Diddee, Sandipan Dandapat, Monojit Choudhury, Tanuja Ganu and Kalika Bali

*Data Augmentation for Inline Tag-Aware Neural Machine Translation*

Yonghyun Ryu, Yoonjung Choi and Sangha Kim

**Wednesday, December 7, 2022 (continued)**

12:40 - 14:00     *Lunch Break*

14:00 - 15:30     *Session 7 — Invited Talk by Ondrej Bojar*

**Thursday, December 8, 2022**

09:00 - 09:10     *Session 5 — Shared Task Overview Papers II*

*Findings of the WMT 2022 Biomedical Translation Shared Task: Monolingual Clinical Case Reports*

Mariana Neves, Antonio Jimeno Yepes, Amy Siu, Roland Roller, Philippe Thomas, Maika Vicente Navarro, Lana Yeganova, Dina Wiemann, Giorgio Maria Di Nunzio, Federica Vezzani, Christel Gerardin, Rachel Bawden, Darryl Johan Estrada, Salvador Lima-lopez, Eulalia Farre-maduel, Martin Krallinger, Cristian Grozea and Aurelie Neveol

*Findings of the WMT 2022 Shared Task on Chat Translation*

Ana C Farinha, M. Amin Farajian, Marianna Buchicchio, Patrick Fernandes, José G. C. De Souza, Helena Moniz and André F. T. Martins

*Findings of the First WMT Shared Task on Sign Language Translation (WMT-SLT22)*

Mathias Müller, Sarah Ebling, Eleftherios Avramidis, Alessia Battisti, Michèle Berger, Richard Bowden, Annelies Braffort, Necati Cihan Camgöz, Cristina España-bonet, Roman Grundkiewicz, Zifan Jiang, Oscar Koller, Amit Moryosef, Regula Perrollaz, Sabine Reinhard, Annette Rios, Dimitar Shterionov, Sandra Sidler-miserez and Katja Tissi

*Findings of the WMT'22 Shared Task on Large-Scale Machine Translation Evaluation for African Languages*

David Adelani, Md Mahfuz Ibn Alam, Antonios Anastasopoulos, Akshita Bhagia, Marta R. Costa-jussà, Jesse Dodge, Fahim Faisal, Christian Federmann, Natalia Fedorova, Francisco Guzmán, Sergey Koshelev, Jean Maillard, Vukosi Marivate, Jonathan Mbuya, Alexandre Mourachko, Safiyyah Saleem, Holger Schwenk and Guillaume Wenzek

*Findings of the WMT 2022 Shared Tasks in Unsupervised MT and Very Low Resource Supervised MT*

Marion Weller-di Marco and Alexander Fraser

*Overview and Results of MixMT Shared-Task at WMT 2022*

Vivek Srivastava and Mayank Singh

*Findings of the Word-Level AutoCompletion Shared Task in WMT 2022*

Francisco Casacuberta, George Foster, Guoping Huang, Philipp Koehn, Geza Kovacs, Lemao Liu, Shuming Shi, Taro Watanabe and Chengqing Zong

*Findings of the WMT 2022 Shared Task on Translation Suggestion*

Zhen Yang, Fandong Meng, Yingxue Zhang, Ernan Li and Jie Zhou

10:30 - 11:00     *Coffee Break*

15:30 - 16:00     *Coffee Break*

16:00 - 17:30     *Session 8 — Shared Task System Description Papers II*

**Thursday, December 8, 2022 (continued)**

16:00 - 17:30 *Biomedical Translation Task*

*The SPECTRANS System Description for the WMT22 Biomedical Task*

Nicolas Ballier, Jean-baptiste Yunès, Guillaume Wisniewski, Lichao Zhu and Maria Zimina

*SRT's Neural Machine Translation System for WMT22 Biomedical Translation Task*

Yoonjung Choi, Jiho Shin, Yonghyun Ryu and Sangha Kim

*Examining Large Pre-Trained Language Models for Machine Translation: What You Don't Know about It*

Lifeng Han, Gleb Erofeev, Irina Sorokina, Serge Gladkoff and Goran Nenadic

*Summer: WeChat Neural Machine Translation Systems for the WMT22 Biomedical Translation Task*

Ernan Li, Fandong Meng and Jie Zhou

*Optum's Submission to WMT22 Biomedical Translation Tasks*

Sahil Manchanda and Saurabh Bhagwat

*Huawei BabelTar NMT at WMT22 Biomedical Translation Task: How We Further Improve Domain-specific NMT*

Weixuan Wang, Xupeng Meng, Suqing Yan, Ye Tian and Wei Peng

*HW-TSC Translation Systems for the WMT22 Biomedical Translation Task*

Zhanglin Wu, Jinlong Yang, Zhiqiang Rao, Zhengzhe Yu, Daimeng Wei, Xiaoyu Chen, Zongyao Li, Hengchao Shang, Shaojun Li, Ming Zhu, Yuanchang Luo, Yuhao Xie, Miaomiao Ma, Ting Zhu, Lizhi Lei, Song Peng, Hao Yang and Ying Qin

16:00 - 17:30 *Chat Translation Task*

*Unbabel-IST at the WMT Chat Translation Shared Task*

João Alves, Pedro Henrique Martins, José G. C. De Souza, M. Amin Farajian and André F. T. Martins

*Investigating Effectiveness of Multi-Encoder for Conversational Neural Machine Translation*

Baban Gain, Ramakrishna Appicharla, Soumya Chennabasavaraj, Nikesh Garera, Asif Ekbal and Muthusamy Chelliah

*BJTU-WeChat's Systems for the WMT22 Chat Translation Task*

Yunlong Liang, Fandong Meng, Jinan Xu, Yufeng Chen and Jie Zhou

Thursday, December 8, 2022 (continued)

*HW-TSC Translation Systems for the WMT22 Chat Translation Task*

Jinlong Yang, Zongyao Li, Daimeng Wei, Hengchao Shang, Xiaoyu Chen, Zhengzhe Yu, Zhiqiang Rao, Shaojun Li, Zhanglin Wu, Yuhao Xie, Yuanchang Luo, Ting Zhu, Yanqing Zhao, Lizhi Lei, Hao Yang and Ying Qin

16:00 - 17:30 *Sign Language Translation Task*

*Clean Text and Full-Body Transformer: Microsoft's Submission to the WMT22 Shared Task on Sign Language Translation*

Subhadeep Dey, Abhilash Pal, Cyrine Chaabani and Oscar Koller

*Spatio-temporal Sign Language Representation and Translation*

Yasser Hamidullah, Josef Van Genabith and Cristina España-bonet

*Experimental Machine Translation of the Swiss German Sign Language via 3D Augmentation of Body Keypoints*

Lorenz Hufe and Eleftherios Avramidis

*TTIC's WMT-SLT 22 Sign Language Translation System*

Bowen Shi, Diane Brentari, Gregory Shakhnarovich and Karen Livescu

*Tackling Low-Resourced Sign Language Translation: UPC at WMT-SLT 22*

Laia Tarres, Gerard I. Gállego, Xavier Giro-i-nieto and Jordi Torres

16:00 - 17:30 *African Languages Translation Task*

*Separating Grains from the Chaff: Using Data Filtering to Improve Multilingual Translation for Low-Resourced African Languages*

Idris Abdulmumin, Michael Beukman, Jesujoba Alabi, Chris Chinenye Emezue, Everlyn Chimoto, Tosin Adewumi, Shamsuddeen Muhammad, Mofetoluwa Adeyemi, Oreen Yousuf, Sahib Singh and Tajuddeen Gwadabe

*Language Adapters for Large-Scale MT: The GMU System for the WMT 2022 Large-Scale Machine Translation Evaluation for African Languages Shared Task*

Md Mahfuz Ibn Alam and Antonios Anastasopoulos

*Samsung Research Philippines - Datasaur AI's Submission for the WMT22 Large Scale Multilingual Translation Task*

Jan Christian Blaise Cruz and Lintang Sutawika

*University of Cape Town's WMT22 System: Multilingual Machine Translation for Southern African Languages*

Khalid Elmadani, Francois Meyer and Jan Buys

Thursday, December 8, 2022 (continued)

*Tencent's Multilingual Machine Translation System for WMT22 Large-Scale African Languages*

Wenxiang Jiao, Zhaopeng Tu, Jiarui Li, Wenxuan Wang, Jen-tse Huang and Shuming Shi

*DENTRA: Denoising and Translation Pre-training for Multilingual Machine Translation*

Samta Kamboj, Sunil Kumar Sahu and Neha Sengupta

*The VolcTrans System for WMT22 Multilingual Machine Translation Task*

Xian Qian, Kai Hu, Jiaqiang Wang, Yifeng Liu, Xingyuan Pan, Jun Cao and Mingxuan Wang

*WebCrawl African : A Multilingual Parallel Corpora for African Languages*

Pavanpankaj Vegi, Sivabhavani J, Biswajit Paul, Abhinav Mishra, Prashant Banjare, Prasanna K R and Chitra Viswanathan

*ANVITA-African: A Multilingual Neural Machine Translation System for African Languages*

Pavanpankaj Vegi, Sivabhavani J, Biswajit Paul, Prasanna K R and Chitra Viswanathan

16:00 - 17:30 *Unsupervised and Very Low Resource Translation Task*

*HW-TSC Systems for WMT22 Very Low Resource Supervised MT Task*

Shaojun Li, Yuanchang Luo, Daimeng Wei, Zongyao Li, Hengchao Shang, Xiaoyu Chen, Zhanglin Wu, Jinlong Yang, Zhiqiang Rao, Zhengzhe Yu, Yuhao Xie, Lizhi Lei, Hao Yang and Ying Qin

*Unsupervised and Very-Low Resource Supervised Translation on German and Sorbian Variant Languages*

Rahul Tangsali, Aditya Vyawahare, Aditya Mandke, Onkar Litake and Dipali Kadam

*MUNI-NLP Systems for Lower Sorbian-German and Lower Sorbian-Upper Sorbian Machine Translation @ WMT22*

Edoardo Signoroni and Pavel Rychlý

*The AIC System for the WMT 2022 Unsupervised MT and Very Low Resource Supervised MT Task*

Ahmad Shapiro, Mahmoud Salama, Omar Abdelhakim, Mohamed Fayed, Ayman Khalafallah and Noha Adly

16:00 - 17:30 *Code-Mixed Translation Task*

*NICT at MixMT 2022: Synthetic Code-Mixed Pre-training and Multi-way Fine-tuning for Hinglish-English Translation*

Raj Dabre

Thursday, December 8, 2022 (continued)

*The NiuTrans Machine Translation Systems for WMT22*

Wei-qiao Shan, Zhi-quan Cao, Yu-chen Han, Si-ming Wu, Yi-min Hu, Jie Wang, Yi Zhang, Hou Baoyu, Hang Cao, Chenghao Gao, Xiaowen Liu, Tong Xiao, Anxiang Ma and Jingbo Zhu

*MUCS@MixMT: IndicTrans-based Machine Translation for Hinglish Text*

Asha Hegde and Shashirekha Lakshmaiah

*SIT at MixMT 2022: Fluent Translation Built on Giant Pre-trained Models*

Abdul Khan, Hrishikesh Kanade, Girish Budhrani, Preet Jhanglani and Jia Xu

*The University of Edinburgh's Submission to the WMT22 Code-Mixing Shared Task (MixMT)*

Faheem Kirefu, Vivek Iyer, Pinzhen Chen and Laurie Burchell

*Findings of the WMT 2022 Biomedical Translation Shared Task: Monolingual Clinical Case Reports*

Mariana Neves, Antonio Jimeno Yepes, Amy Siu, Roland Roller, Philippe Thomas, Maika Vicente Navarro, Lana Yeganova, Dina Wiemann, Giorgio Maria Di Nunzio, Federica Vezzani, Christel Gerardin, Rachel Bawden, Darryl Johan Estrada, Salvador Lima-lopez, Eulalia Farre-maduel, Martin Krallinger, Cristian Grozea and Aurelie Neveol

*Domain Curricula for Code-Switched MT at MixMT 2022*

Lekan Raheem, Maab Elrashid, Melvin Johnson and Julia Kreutzer

16:00 - 17:30

*Word-Level Autocompletion Task*

*Lingua Custodia's Participation at the WMT 2022 Word-Level Auto-completion Shared Task*

Melissa Ailem, Jingshu Liu, Jean-gabriel Barthelemy and Raheel Qader

*Translation Word-Level Auto-Completion: What Can We Achieve Out of the Box?*

Yasmin Moslem, Rejwanul Haque and Andy Way

*PRHLT's Submission to WLAC 2022*

Angel Navarro, Miguel Domingo and Francisco Casacuberta

*IIGROUP Submissions for WMT22 Word-Level AutoCompletion Task*

Cheng Yang, Siheng Li, Chufan Shi and Yujiu Yang

Thursday, December 8, 2022 (continued)

*HW-TSC's Submissions to the WMT22 Word-Level Auto Completion Task*

Hao Yang, Hengchao Shang, Zongyao Li, Daimeng Wei, Xianghui He, Xiaoyu Chen, Zhengzhe Yu, Jiaxin Guo, Jinlong Yang, Shaojun Li, Yuanchang Luo, Yuhao Xie, Lizhi Lei and Ying Qin

16:00 - 17:30      *Translation Suggestion Task*

*TSMind: Alibaba and Soochow University's Submission to the WMT22 Translation Suggestion Task*

Xin Ge, Ke Wang, Jiayi Wang, Nini Xiao, Xiangyu Duan, Yu Zhao and Yuqi Zhang

*Transn's Submissions to the WMT22 Translation Suggestion Task*

Mao Hongbao, Zhang Wenbo, Cai Jie and Cheng Jianwei

*Improved Data Augmentation for Translation Suggestion*

Hongxiao Zhang, Siyu Lai, Songming Zhang, Hui Huang, Yufeng Chen, Jinan Xu and Jian Liu