3rd Workshop on Asian Translation (WAT 2016)

Osaka, Japan
11 - 16 December 2016

ISBN: 978-1-5108-3326-5

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© (2016) by the Association for Computational Linguistics
All rights reserved.

Printed by Curran Associates, Inc. (2016)

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

Overview of the 3rd Workshop on Asian Translation
Toshiaki Nakazawa, Chenchen Ding, Hideya MINO, Isao Goto, Graham Neubig and Sadao Kurohashi 1

Translation of Patent Sentences with a Large Vocabulary of Technical Terms Using Neural Machine Translation
Zi Long, Takehito Utsuro, Tomoharu Mitsuhashi and Mikio Yamamoto 47

Japanese-English Machine Translation of Recipe Texts
Takayuki Sato, Jun Harashima and Mamoru Komachi 58

IIT Bombay's English-Indonesian submission at WAT: Integrating Neural Language Models with SMT
Sandhya Singh, Anoop Kunchukuttan and Pushpak Bhattacharyya 68

Domain Adaptation and Attention-Based Unknown Word Replacement in Chinese-to-Japanese Neural Machine Translation
Kazuma Hashimoto, Akiko Eriguchi and Yoshimasa Tsuruoka 75

Global Pre-ordering for Improving Sublanguage Translation
Masaru Fuji, Masao Utiyama, Eiichiro Sumita and Yuji Matsumoto 84

Neural Reordering Model Considering Phrase Translation and Word Alignment for Phrase-based Translation
Shin Kanouchi, Katsuhito Sudoh and Mamoru Komachi 94

System Description of bjtu_nlp Neural Machine Translation System
Shaotong Li, JinAn Xu, Yufeng Chen and Yujie Zhang 104

Translation systems and experimental results of the EHR group for WAT2016 tasks
Terumasa Ehara 111

Lexicons and Minimum Risk Training for Neural Machine Translation: NAIST-CMU at WAT2016
Graham Neubig 119

NICT-2 Translation System for WAT2016: Applying Domain Adaptation to Phrase-based Statistical Machine Translation
Kenji Imamura and Eiichiro Sumita 126

Translation Using JAPIO Patent Corpora: JAPIO at WAT2016
Satoshi Kinoshita, Tadaaki Oshio, Tomoharu Mitsuhashi and Terumasa Ehara 133

An Efficient and Effective Online Sentence Segmenter for Simultaneous Interpretation
Xiaolin Wang, Andrew Finch, Masao Utiyama and Eiichiro Sumita 139

Similar Southeast Asian Languages: Corpus-Based Case Study on Thai-Laotian and Malay-Indonesian
Chenchen Ding, Masao Utiyama and Eiichiro Sumita 149

Integrating empty category detection into preordering Machine Translation
Shunsuke Takeno, Masaaki Nagata and Kazuhide Yamamoto 157

Kyoto University Participation to WAT 2016
Fabien Cromieres, Chenhui Chu, Toshiaki Nakazawa and Sadao Kurohashi 166

Character-based Decoding in Tree-to-Sequence Attention-based Neural Machine Translation
Akiko Eriguchi, Kazuma Hashimoto and Yoshimasa Tsuruoka 175

Faster and Lighter Phrase-based Machine Translation Baseline
Liling Tan 184

Improving Patent Translation using Bilingual Term Extraction and Re-tokenization for Chinese–Japanese
Wei Yang and Yves Lepage 194

Controlling the Voice of a Sentence in Japanese-to-English Neural Machine Translation
Hayahide Yamagishi, Shin Kanouchi, Takayuki Sato and Mamoru Komachi 203

Chinese-to-Japanese Patent Machine Translation based on Syntactic Pre-ordering for WAT 2016
Katsuhito Sudoh and Masaaki Nagata 211

IITP English-Hindi Machine Translation System at WAT 2016
Sukanta Sen, Debajyoty Banik, Asif Ekbal and Pushpak Bhattacharyya 216

Residual Stacking of RNNs for Neural Machine Translation
Raphael Shu and Akiva Miura 223