

# **27th International Conference on Computational Linguistics (COLING 2018)**

System Demonstrations

Santa Fe, New Mexico, USA  
20 – 26 August 2018

ISBN: 978-1-5108-6905-9

**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© (2018) by the Association for Computational Linguistics  
All rights reserved.

Printed by Curran Associates, Inc. (2018)

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](mailto: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](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## Table of Contents

<i>Abbreviation Expander - a Web-based System for Easy Reading of Technical Documents</i> Manuel Ciosici and Ira Assent . . . . .	1
<i>The INCEPTION Platform: Machine-Assisted and Knowledge-Oriented Interactive Annotation</i> Jan-Christoph Klie, Michael Bugert, Beto Boullosa, Richard Eckart de Castilho and Iryna Gurevych . . . . .	5
<i>JeSemE: Interleaving Semantics and Emotions in a Web Service for the Exploration of Language Change Phenomena</i> Johannes Hellrich, Sven Buechel and Udo Hahn . . . . .	10
<i>T-Know: a Knowledge Graph-based Question Answering and Information Retrieval System for Traditional Chinese Medicine</i> Ziqing Liu, Enwei Peng, Shixing Yan, Guozheng Li and Tianyong Hao . . . . .	15
<i>A Korean Knowledge Extraction System for Enriching a KBox</i> Sangha Nam, Eun-kyung Kim, Jiho Kim, Yoosung Jung, Kijong Han and KEY-SUN CHOI . . . . .	20
<i>Real-time Scholarly Retweeting Prediction System</i> Zhunchen Luo and Xiao Liu . . . . .	25
<i>Document Representation Learning for Patient History Visualization</i> Halid Ziya Yerebakan, Yoshihisa Shinagawa, Parmeet Bhatia and Yiqiang Zhan . . . . .	30
<i>HiDE: a Tool for Unrestricted Literature Based Discovery</i> Judita Preiss and Mark Stevenson . . . . .	34
<i>Active DOP: an Active Learning Constituency Treebank Annotation Tool</i> Andreas van Cranenburgh . . . . .	38
<i>CRST: a Claim Retrieval System in Twitter</i> Wenjia Ma, WenHan Chao, Zhunchen Luo and Xin Jiang . . . . .	43
<i>Utilizing Graph Measure to Deduce Omitted Entities in Paragraphs</i> Eun-kyung Kim, Kijong Han, Jiho Kim and KEY-SUN CHOI . . . . .	48
<i>Transparent, Efficient, and Robust Word Embedding Access with WOMBAT</i> Mark-Christoph Müller and Michael Strube . . . . .	53
<i>SetExpander: End-to-end Term Set Expansion Based on Multi-Context Term Embeddings</i> Jonathan Mamou, Oren Pereg, Moshe Wasserblat, Ido Dagan, Yoav Goldberg, Alon Eirew, Yael Green, Shira Guskin, Peter Izsak and Daniel Korat . . . . .	58
<i>Detecting Heavy Rain Disaster from Social and Physical Sensor</i> Tomoya Iwakura, Seiji Okajima, Nobuyuki Igata, Kunihiro Takeda, Yuzuru Yamakage and Naoshi Morita . . . . .	63
<i>Simulating Language Evolution: a Tool for Historical Linguistics</i> Alina Maria Ciobanu and Liviu P. Dinu . . . . .	68
<i>A Unified RvNN Framework for End-to-End Chinese Discourse Parsing</i> Lin Chuan-An, Hen-Hsen Huang, Zi-Yuan Chen and Hsin-Hsi Chen . . . . .	73

<i>A Web-based Framework for Collecting and Assessing Highlighted Sentences in a Document</i> Sasha Spala, Franck Deroncourt, Walter Chang and Carl Dockhorn .....	78
<i>Cool English: a Grammatical Error Correction System Based on Large Learner Corpora</i> Yu-Chun Lo, Jhih-Jie Chen, Chingyu Yang and Jason Chang .....	82
<i>Appraise Evaluation Framework for Machine Translation</i> Christian Federmann .....	86
<i>KIT Lecture Translator: Multilingual Speech Translation with One-Shot Learning</i> Florian Dessloch, Thanh-Le Ha, Markus Müller, Jan Niehues, Thai Son Nguyen, Ngoc-Quan Pham, Elizabeth Salesky, Matthias Sperber, Sebastian Stüker, Thomas Zenkel and Alexander Waibel .....	89
<i>Graphene: a Context-Preserving Open Information Extraction System</i> Matthias Cetto, Christina Niklaus, André Freitas and Siegfried Handschuh .....	94
<i>LanguageNet: Learning to Find Sense Relevant Example Sentences</i> Shang-Chien Cheng, Jhih-Jie Chen, Chingyu Yang and Jason Chang .....	99
<i>Automatic Curation and Visualization of Crime Related Information from Incrementally Crawled Multi-source News Reports</i> Tirthankar Dasgupta, Lipika Dey, Rupsa Saha and Abir Naskar .....	103
<i>Lingke: a Fine-grained Multi-turn Chatbot for Customer Service</i> Pengfei Zhu, Zhuosheng Zhang, Jiangtong Li, Yafang Huang and Hai Zhao .....	108
<i>Writing Mentor: Self-Regulated Writing Feedback for Struggling Writers</i> Nitin Madhani, Jill Burstein, Norbert Elliot, Beata Beigman Klebanov, Diane Napolitano, Slava Andreyev and Maxwell Schwartz .....	113
<i>NLATool: an Application for Enhanced Deep Text Understanding</i> Markus Gärtner, Sven Mayer, Valentin Schwind, Eric Hämmerle, Emine Turcan, Florin Rheinwald, Gustav Murawski, Lars Lischke and Jonas Kuhn .....	118
<i>Sensala: a Dynamic Semantics System for Natural Language Processing</i> Daniyar Itegulov, Ekaterina Lebedeva and Bruno Woltzenlogel Paleo .....	123
<i>On-Device Neural Language Model Based Word Prediction</i> Seunghak Yu, Nilesh Kulkarni, Haejun Lee and Jihie Kim .....	128
<i>WARP-Text: a Web-Based Tool for Annotating Relationships between Pairs of Texts</i> Venelin Kovatchev, Toni Marti and Maria Salamo .....	132
<i>A Chinese Writing Correction System for Learning Chinese as a Foreign Language</i> Yow-Ting Shiue, Hen-Hsen Huang and Hsin-Hsi Chen .....	137
<i>LTV: Labeled Topic Vector</i> Daniel Baumartz, Tolga Uslu and Alexander Mehler .....	142
<i>Interpretable Rationale Augmented Charge Prediction System</i> Xin Jiang, Hai Ye, Zhunchen Luo, WenHan Chao and Wenjia Ma .....	146
<i>A Cross-lingual Messenger with Keyword Searchable Phrases for the Travel Domain</i> Shehroze Khan, Jihyun Kim, Tarik Zulfikarpasic, Peter Chen and Nizar Habash .....	152

<i>Towards Automated Extraction of Business Constraints from Unstructured Regulatory Text</i> Rahul Nair, Killian Levacher and Martin Stephenson . . . . .	157
<i>A Flexible and Easy-to-use Semantic Role Labeling Framework for Different Languages</i> Quynh Ngoc Thi Do, Artuur Leeuwenberg, Geert Heyman and Marie-Francine Moens . . . . .	161