

# **1st Workshop on NLP for Conversational AI 2019**

Florence, Italy  
1 August 2019

ISBN: 978-1-5108-9107-4

**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© (2019) by the Association for Computational Linguistics  
All rights reserved.

Printed by Curran Associates, Inc. (2019)

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>A Repository of Conversational Datasets</i>	
Matthew Henderson, Paweł Budzianowski, Iñigo Casanueva, Sam Coope, Daniela Gerz, Girish Kumar, Nikola Mrkšić, Georgios Spithourakis, Pei-Hao Su, Ivan Vulić and Tsung-Hsien Wen . . . . .	1
<i>A Simple but Effective Method to Incorporate Multi-turn Context with BERT for Conversational Machine Comprehension</i>	
Yasuhito Ohsugi, Itsumi Saito, Kyosuke Nishida, Hisako Asano and Junji Tomita . . . . .	11
<i>Augmenting Neural Response Generation with Context-Aware Topical Attention</i>	
Nouha Dziri, Ehsan Kamaloo, Kory Mathewson and Osmar Zaiane . . . . .	18
<i>Building a Production Model for Retrieval-Based Chatbots</i>	
Kyle Swanson, Lili Yu, Christopher Fox, Jeremy Wohlwend and Tao Lei . . . . .	32
<i>Co-Operation as an Asymmetric Form of Human-Computer Creativity. Case: Peace Machine</i>	
Mika Hämmäläinen and Timo Honkela . . . . .	42
<i>Conversational Response Re-ranking Based on Event Causality and Role Factored Tensor Event Embedding</i>	
Shohei Tanaka, Koichiro Yoshino, Katsuhito Sudoh and Satoshi Nakamura . . . . .	51
<i>DSTC7 Task 1: Noetic End-to-End Response Selection</i>	
Chulaka Gunasekara, Jonathan K. Kummerfeld, Lazaros Polymenakos and Walter Lasecki . . . . .	60
<i>End-to-End Neural Context Reconstruction in Chinese Dialogue</i>	
Wei Yang, Rui Qiao, Haocheng Qin, Amy Sun, Luchen Tan, Kun Xiong and Ming Li . . . . .	68
<i>Energy-Based Modelling for Dialogue State Tracking</i>	
Anh Duong Trinh, Robert Ross and John Kelleher . . . . .	77
<i>Evaluation and Improvement of Chatbot Text Classification Data Quality Using Plausible Negative Examples</i>	
Kit Kuksenok and Andriy Martyniv . . . . .	87
<i>Improving Long Distance Slot Carryover in Spoken Dialogue Systems</i>	
Tongfei Chen, Chetan Naik, Hua He, Pushpendre Rastogi and Lambert Mathias . . . . .	96
<i>Insights from Building an Open-Ended Conversational Agent</i>	
Khyatti Gupta, Meghana Joshi, Ankush Chatterjee, Sonam Damani, Kedhar Nath Narahari and Puneet Agrawal . . . . .	106
<i>Learning to Explain: Answering Why-Questions via Rephrasing</i>	
Allen Nie, Erin Bennett and Noah Goodman . . . . .	113
<i>Multi-turn Dialogue Response Generation in an Adversarial Learning Framework</i>	
Oluwatobi Olabiyi, Alan O Salimov, Anish Khazane and Erik Mueller . . . . .	121
<i>Relevant and Informative Response Generation using Pointwise Mutual Information</i>	
Junya Takayama and Yuki Arase . . . . .	133
<i>Responsive and Self-Expressive Dialogue Generation</i>	
Kozo Chikai, Junya Takayama and Yuki Arase . . . . .	139