

EMNLP 2017

**The Conference on
Empirical Methods in
Natural Language Processing**

Proceedings of System Demonstrations

September 9-11, 2017
Copenhagen, Denmark

©2017 The Association for Computational Linguistics

Order copies of this and other ACL proceedings from:

Association for Computational Linguistics (ACL)
209 N. Eighth Street
Stroudsburg, PA 18360
USA
Tel: +1-570-476-8006
Fax: +1-570-476-0860
acl@aclweb.org

ISBN 978-1-945626-97-5

Introduction

Welcome to the proceedings of the System Demonstrations session. This volume contains the papers of the system demonstrations presented at the annual meeting of the Conference on Empirical Methods in Natural Language Processing, held in Copenhagen, Denmark from September 7–11, 2017.

The system demonstrations program offers the presentation of early research prototypes as well as interesting mature systems. We received 53 submissions, of which 21 (39%) were selected for inclusion in the program after review by three or four members of the program committee.

We sincerely thank the members of the program committee for their timely help in reviewing the submissions.

Organizers:

Lucia Specia (University of Sheffield)
Matt Post (Johns Hopkins University)
Michael Paul (University of Colorado)

Program Committee:

Alan Akbik	Douwe Kiela	Hiroshi Noji
Marianna Apidianaki	Johannes Kirschnick	Pierre Nugues
Eleftherios Avramidis	Philipp Koehn	Yusuke Oda
Mahmoud Azab	Valia Kordoni	Tsuyoshi Okita
Simon Baker	Anoop Kunchukuttan	Petya Osenova
Miguel Ballesteros	Finley Lacatusu	Arzucan Özgür
Gianni Barlacchi	Mark Last	Alexander Panchenko
Daniel Bauer	Carolyn Lawrence	Yannick Parmentier
Laurent Besacier	Yunyao Li	Stelios Piperidis
Chris Biemann	Marina Litvak	Barbara Plank
Frédéric Blain	Changsong Liu	Maja Popović
Bernd Bohnet	Nikola Ljubešić	Prokopis Prokopidis
Georgeta Bordea	Clare Llewellyn	Ratish Puduppully
Aljoscha Burchardt	Andreas Lommatzsch	Sampo Pyysalo
Jill Burstein	Wencan Luo	Mohammed R. H. Qwaider
José G. C. de Souza	Juhani Luotolahti	Alessandro Raganato
Maria Chinkina	Nitin Madhani	Afshin Rahimi
Vincent Claveau	Wolfgang Maier	Carlos Ramisch
Anne Cocos	Benjamin Marie	German Rigau
Montse Cuadros	Stella Markantonatou	Kirk Roberts
Beatrice Daille	Sebastian Martschat	Melissa Roemmele
Falavigna Daniele	Pascual Martínez-Gómez	Masoud Rouhizadeh
Thierry Declerck	Marie-Jean Meurs	Pablo Ruiz
Jay DeYoung	Christian M. Meyer	Irene Russo
Patrick Ernst	Ivan Vladimir Meza Ruiz	Sakriani Sakti
Dimitris Galanis	Margot Mieskes	Naomi Saphra
Chase Geigle	Simon Mille	Carolina Scarton
Ryan Georgi	Koji Mineshima	Sven Schmeier
Filip Ginter	Shachar Mirkin	Djamé Seddah
Iryna Gurevych	Alessandro Moschitti	Michel Simard
Yifan He	Philippe Muller	Sameer Singh
Leonhard Hennig	Robert Mundkowsky	Amy Siu
Barbora Hladka	Preslav Nakov	Konstantinos Skianis
Shahab Jalalvand	Courtney Napoles	Charese Smiley
Masoud Jalili Sabet	Diane Napolitano	Juan Soler
Jenna Kanerva	Matteo Negri	Dezhao Song

Josef Steinberger
Pontus Stenertorp
Sebastian Sulger
Kaveh Taghipour
Nadi Tomeh
Marco Turchi
Maarten van Gompel

Natalia Vanetik
Andrea Varga
Marc Vilain
Yafang Wang
Leo Wanner
Marion Weller-Di Marco
Guillaume Wisniewski

Travis Wolfe
Seid Muhie Yimam
Mo Yu
Liang-Chih Yu
Pierre Zweigenbaum

Table of Contents

<i>The NLTK FrameNet API: Designing for Discoverability with a Rich Linguistic Resource</i> Nathan Schneider and Chuck Wooters	1
<i>Argotario: Computational Argumentation Meets Serious Games</i> Ivan Habernal, Raffael Hannemann, Christian Pollak, Christopher Klamm, Patrick Pauli and Iryna Gurevych	7
<i>An Analysis and Visualization Tool for Case Study Learning of Linguistic Concepts</i> Cecilia Ovesdotter Alm, Benjamin Meyers and Emily Prud'hommeaux	13
<i>GraphDocExplore: A Framework for the Experimental Comparison of Graph-based Document Exploration Techniques</i> Tobias Falke and Iryna Gurevych	19
<i>SGNMT – A Flexible NMT Decoding Platform for Quick Prototyping of New Models and Search Strategies</i> Felix Stahlberg, Eva Hasler, Danielle Saunders and Bill Byrne	25
<i>StruAP: A Tool for Bundling Linguistic Trees through Structure-based Abstract Pattern</i> Kohsuke Yanai, Misa Sato, Toshihiko Yanase, Kenzo Kurotsuchi, Yuta Koreeda and Yoshiki Niwa	31
<i>KnowYourNyms? A Game of Semantic Relationships</i> Ross Mechanic, Dean Fulgoni, Hannah Cutler, Sneha Rajana, Zheyuan Liu, Bradley Jackson, Anne Cocos, Chris Callison-Burch and Marianna Apidianaki	37
<i>The Projector: An Interactive Annotation Projection Visualization Tool</i> Alan Akbik and Roland Vollgraf	43
<i>Interactive Visualization for Linguistic Structure</i> Aaron Sarnat, Vidur Joshi, Cristian Petrescu-Prahova, Alvaro Herrasti, Brandon Stilson and Mark Hopkins	49
<i>DLATK: Differential Language Analysis ToolKit</i> H. Andrew Schwartz, Salvatore Giorgi, Maarten Sap, Patrick Crutchley, Lyle Ungar and Johannes Eichstaedt	55
<i>QUINT: Interpretable Question Answering over Knowledge Bases</i> Abdalghani Abujabal, Rishiraj Saha Roy, Mohamed Yahya and Gerhard Weikum	61
<i>Function Assistant: A Tool for NL Querying of APIs</i> Kyle Richardson and Jonas Kuhn	67
<i>MoodSwipe: A Soft Keyboard that Suggests MessageBased on User-Specified Emotions</i> Chieh-Yang Huang, Tristan Labetoulle, Ting-Hao Huang, Yi-Pei Chen, Hung-Chen Chen, Vallari Srivastava and Lun-Wei Ku	73
<i>ParlAI: A Dialog Research Software Platform</i> Alexander Miller, Will Feng, Dhruv Batra, Antoine Bordes, Adam Fisch, Jiasen Lu, Devi Parikh and Jason Weston	79

<i>HeidelPlace: An Extensible Framework for Geoparsing</i>	
Ludwig Richter, Johanna Geiß, Andreas Spitz and Michael Gertz	85
<i>Unsupervised, Knowledge-Free, and Interpretable Word Sense Disambiguation</i>	
Alexander Panchenko, Fide Marten, Eugen Ruppert, Stefano Faralli, Dmitry Ustalov, Simone Paolo Ponzetto and Chris Biemann	91
<i>NeuroNER: an easy-to-use program for named-entity recognition based on neural networks</i>	
Franck Dernoncourt, Ji Young Lee and Peter Szolovits	97
<i>SupWSD: A Flexible Toolkit for Supervised Word Sense Disambiguation</i>	
Simone Papandrea, Alessandro Raganato and Claudio Delli Bovi	103
<i>Interactive Abstractive Summarization for Event News Tweets</i>	
Ori Shapira, Hadar Ronen, Meni Adler, Yael Amsterdamer, Judit Bar-Ilan and Ido Dagan	109
<i>LangPro: Natural Language Theorem Prover</i>	
Lasha Abzianidze	115
<i>Interactive Visualization and Manipulation of Attention-based Neural Machine Translation</i>	
Jaesong Lee, Joong-Hwi Shin and Jun-Seok Kim	121

Conference Program

Saturday, September 9, 2017

10:30–12:10 *Demo Session*

The NLTK FrameNet API: Designing for Discoverability with a Rich Linguistic Resource

Nathan Schneider and Chuck Wooters

Argotario: Computational Argumentation Meets Serious Games

Ivan Habernal, Raffael Hannemann, Christian Pollak, Christopher Klam, Patrick Pauli and Iryna Gurevych

An Analysis and Visualization Tool for Case Study Learning of Linguistic Concepts

Cecilia Ovesdotter Alm, Benjamin Meyers and Emily Prud'hommeaux

GraphDocExplore: A Framework for the Experimental Comparison of Graph-based Document Exploration Techniques

Tobias Falke and Iryna Gurevych

SGNMT – A Flexible NMT Decoding Platform for Quick Prototyping of New Models and Search Strategies

Felix Stahlberg, Eva Hasler, Danielle Saunders and Bill Byrne

StruAP: A Tool for Bundling Linguistic Trees through Structure-based Abstract Pattern

Kohsuke Yanai, Misa Sato, Toshihiko Yanase, Kenzo Kurotsuchi, Yuta Koreeda and Yoshiki Niwa

KnowYourNyms? A Game of Semantic Relationships

Ross Mechanic, Dean Fulgoni, Hannah Cutler, Sneha Rajana, Zheyuan Liu, Bradley Jackson, Anne Cocos, Chris Callison-Burch and Marianna Apidianaki

The Projector: An Interactive Annotation Projection Visualization Tool

Alan Akbik and Roland Vollgraf

Interactive Visualization for Linguistic Structure

Aaron Sarnat, Vidur Joshi, Cristian Petrescu-Prahova, Alvaro Herrasti, Brandon Stilson and Mark Hopkins

DLATK: Differential Language Analysis ToolKit

H. Andrew Schwartz, Salvatore Giorgi, Maarten Sap, Patrick Crutchley, Lyle Ungar and Johannes Eichstaedt

Saturday, September 9, 2017 (continued)

QUINT: Interpretable Question Answering over Knowledge Bases

Abdalghani Abujabal, Rishiraj Saha Roy, Mohamed Yahya and Gerhard Weikum

Function Assistant: A Tool for NL Querying of APIs

Kyle Richardson and Jonas Kuhn

MoodSwipe: A Soft Keyboard that Suggests MessageBased on User-Specified Emotions

Chieh-Yang Huang, Tristan Labetoulle, Ting-Hao Huang, Yi-Pei Chen, Hung-Chen Chen, Vallari Srivastava and Lun-Wei Ku

ParlAI: A Dialog Research Software Platform

Alexander Miller, Will Feng, Dhruv Batra, Antoine Bordes, Adam Fisch, Jiasen Lu, Devi Parikh and Jason Weston

HeidelPlace: An Extensible Framework for Geoparsing

Ludwig Richter, Johanna Geiß, Andreas Spitz and Michael Gertz

Unsupervised, Knowledge-Free, and Interpretable Word Sense Disambiguation

Alexander Panchenko, Fide Marten, Eugen Ruppert, Stefano Faralli, Dmitry Ustalov, Simone Paolo Ponzetto and Chris Biemann

NeuroNER: an easy-to-use program for named-entity recognition based on neural networks

Franck Dernoncourt, Ji Young Lee and Peter Szolovits

SupWSD: A Flexible Toolkit for Supervised Word Sense Disambiguation

Simone Papandrea, Alessandro Raganato and Claudio Delli Bovi

Interactive Abstractive Summarization for Event News Tweets

Ori Shapira, Hadar Ronen, Meni Adler, Yael Amsterdamer, Judit Bar-Ilan and Ido Dagan

LangPro: Natural Language Theorem Prover

Lasha Abzianidze

Interactive Visualization and Manipulation of Attention-based Neural Machine Translation

Jaesong Lee, Joong-Hwi Shin and Jun-Seok Kim