24th Conference on Computational Natural Language Learning (CoNLL 2020)

Online
19 - 20 November 2020

ISBN: 978-1-7138-1992-9

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© (2020) by the Association for Computational Linguistics
All rights reserved.

Printed with permission by Curran Associates, Inc. (2021)

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

Enriching Word Embeddings with Temporal and Spatial Information
Hongyu Gong, Suma Bhat and Pramod Viswanath 1

Interpreting Attention Models with Human Visual Attention in Machine Reading Comprehension
Ekta Sood, Simon Tannert, Diego Frassinelli, Andreas Bulling and Ngoc Thang Vu 12

Neural Proof Nets
Konstantinos Kogkalidis, Michael Moortgat and Richard Moot 26

TaxiNLI: Taking a Ride up the NLU Hill
Pratik Joshi, Somak Aditya, Aalok Sathe and Monojit Choudhury 41

Modeling Subjective Assessments of Guilt in Newspaper Crime Narratives
Elisa Kreiss, Zijian Wang and Christopher Potts 56

On the Frailty of Universal POS Tags for Neural UD Parsers
Mark Anderson and Carlos Gómez-Rodríguez 69

Classifying Syntactic Errors in Learner Language
Leshem Choshen, Dmitry Nikolaev, Yevgeni Berzak and Omri Abend 97

How to Probe Sentence Embeddings in Low-Resource Languages: On Structural Design Choices for Probing Task Evaluation
Steffen Eger, Johannes Daxenberger and Iryna Gurevych 108

Understanding the Source of Semantic Regularities in Word Embeddings
Hsiao-Yu Chiang, Jose Camacho-Collados and Zachary Pardos 119

Finding The Right One and Resolving it
Payal Khullar, Arghya Bhattacharya and Manish Shrivastava 132

Bridging Information-Seeking Human Gaze and Machine Reading Comprehension
Jonathan Malmaud, Roger Levy and Yevgeni Berzak 142

A Corpus of Very Short Scientific Summaries
Yifan Chen, Tamara Polajnar, Colin Batchelor and Simone Teufel 153

Recurrent babbling: evaluating the acquisition of grammar from limited input data
Ludovica Pannitto and Aurélie Herbelot 165

Explaining the efficiency of communication: How communicators can reduce their computational burden through interaction
Jacqueline van Arkel, Marieke Woensdregt, Mark Dingemanse and Mark Blokpoel 177

Acquiring language from speech by learning to remember and predict
Cory Shain and Micha Elsner 195

Identifying Incorrect Labels in the CoNLL-2003 Corpus
Frederick Reiss, Hong Xu, Bryan Cutler, Karthik Muthuraman and Zachary Eichenberger 215

When is a bishop not like a rook? When it's like a rabbi! Multi-prototype BERT embeddings for estimating semantic relationships
Gabriella Chronis and Katrin Erk 227

Processing effort is a poor predictor of cross-linguistic word order frequency
Brennan Gonering and Emily Morgan 245

Relations between comprehensibility and adequacy errors in machine translation output
Maja Popović 256

Cross-lingual Embeddings Reveal Universal and Lineage-Specific Patterns in Grammatical Gender Assignment
Hartger Veeman, Marc Allassonnière-Tang, Aleksandrs Berdicevskis and Ali Basirat 265

Modelling Lexical Ambiguity with Density Matrices
Francois Meyer and Martha Lewis 276

Catplayinginthesnow: Impact of Prior Segmentation on a Model of Visually Grounded Speech
William Havard, Laurent Besacier and Jean-Pierre Chevrot 291

Learning to ground medical text in a 3D human atlas
Dusan Grujicic, Gorjan Radevski, Tinne Tuytelaars and Matthew Blaschko 302

Representation Learning for Type-Driven Composition
Gijs Wijnholds, Mehrnoosh Sadrzadeh and Stephen Clark 313

Word Representations Concentrate and This is Good News!
Romain Couillet, Yagmur Gizem Cinar, Eric Gaussier and Muhammad Imran 325

"LazImpa": Lazy and Impatient neural agents learn to communicate efficiently
Mathieu Rita, Rahma Chaabouni and Emmanuel Dupoux 335

Re-solve it: simulating the acquisition of core semantic competences from small data
Aurélie Herbelot 344

In Media Res: A Corpus for Evaluating Named Entity Linking with Creative Works
Adrian M.P. Brasoveanu, Albert Weichselbraun and Lyndon Nixon 355

Analogies minus analogy test: measuring regularities in word embeddings
Louis Fournier, Emmanuel Dupoux and Ewan Dunbar 365

Word associations and the distance properties of context-aware word embeddings
Maria A. Rodriguez and Paola Merlo 376

TrClaim-19: The First Collection for Turkish Check-Worthy Claim Detection with Annotator Rationales
Yavuz Selim Kartal and Mucahid Kutlu 386

Discourse structure interacts with reference but not syntax in neural language models
Forrest Davis and Marten van Schijndel 396

Continual Adaptation for Efficient Machine Communication
Robert Hawkins, Minae Kwon, Dorsa Sadigh and Noah Goodman 408

Diverse and Relevant Visual Storytelling with Scene Graph Embeddings
Xudong Hong, Rakshith shetty, Asad Sayeed, Khushboo Mehra, Vera Demberg and Bernt Schiele 420

Alleviating Digitization Errors in Named Entity Recognition for Historical Documents
Emanuela Boros, Ahmed Hamdi, Elvys Linhares Pontes, Luis Adrián Cabrera-Diego, Jose G. Moreno, Nicolas Sidere and Antoine Doucet 431

Analysing Word Representation from the Input and Output Embeddings in Neural Network Language Models
Steven Derby, Paul Miller and Barry Devereux 442

On the Computational Power of Transformers and Its Implications in Sequence Modeling
Satwik Bhattamishra, Arkil Patel and Navin Goyal 455

An Expectation Maximisation Algorithm for Automated Cognate Detection
Roddy MacSween and Andrew Caines 476

Filler-gaps that neural networks fail to generalize
Debasmita Bhattacharya and Marten van Schijndel 486

Don't Parse, Insert: Multilingual Semantic Parsing with Insertion Based Decoding
Qile Zhu, Haidar Khan, Saleh Soltan, Stephen Rawls and Wael Hamza 496

Learning Context-free Languages with Nondeterministic Stack RNNs
Brian DuSell and David Chiang 507

Generating Narrative Text in a Switching Dynamical System
Noah Weber, Leena Shekhar, Heeyoung Kwon, Niranjan Balasubramanian and Nathanael Chambers 520

What Are You Trying to Do? Semantic Typing of Event Processes
Muhao Chen, Hongming Zhang, Haoyu Wang and Dan Roth 531

A Corpus for Outbreak Detection of Diseases Prevalent in Latin America
Antonella Dellanzo, Viviana Cotik and Jose Ochoa-Luna 543

Are Pretrained Language Models Symbolic Reasoners over Knowledge?
Nora Kassner, Benno Krojer and Hinrich Schütze 552

Understanding Linguistic Accommodation in Code-Switched Human-Machine Dialogues
Tanmay Parekh, Emily Ahn, Yulia Tsvetkov and Alan W Black 565

Identifying robust markers of Parkinson's disease in typing behaviour using a CNN-LSTM network
Neil Dhir, Mathias Edman, Álvaro Sanchez Ferro, Tom Stafford and Colin Bannard 578

An Empirical Study on Model-agnostic Debiasing Strategies for Robust Natural Language Inference
Tianyu Liu, Zheng Xin, Xiaoan Ding, Baobao Chang and Zhifang Sui 596

Cloze Distillation Improves Psychometric Predictive Power
Tiwalayo Eisape, Noga Zaslavsky and Roger Levy 609

Disentangling dialects: a neural approach to Indo-Aryan historical phonology and subgrouping
Chundra Cathcart and Taraka Rama 620

A Dataset for Linguistic Understanding, Visual Evaluation, and Recognition of Sign Languages: The K-RSL
Alfarabi Imashev, Medet Mukushev, Vadim Kimmelman and Anara Sandygulova 631

From Dataset Recycling to Multi-Property Extraction and Beyond
Tomasz Dwojak, Michał Pietruszka, Łukasz Borchmann, Jakub Chłędowski and Filip Graliński641

How well does surprisal explain N400 amplitude under different experimental conditions?
James Michaelov and Benjamin Bergen 652