

COLING 2020

**The 28th International Conference
on Computational Linguistics**

Proceedings of the Conference

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Preface: General Chair

On behalf of the International Committee on Computational Linguistics (ICCL), I am delighted to welcome you to the 28th International Conference on Computational Linguistics: COLING2020.

Only eighteen months ago, I joined Leo, Horacio, Mónica, and Nuria on a tour of the delights that the Barcelona venue would be offering us in September 2020. Together with Chengqing, we made great plans for a fantastic intellectual and social gathering with our colleagues from far and wide, Catalan-style. We held on to this plan for as long as we could but the second wave of the COVID-19 pandemic eventually put paid to that idea, and the conference is now a virtual one. We also received a record 2195 submissions – eclipsing by double the already record-breaking number at our last COLING in 2018 in Santa Fe.

For these reasons, COLING2020 will be remembered for the conference that forced us to innovate and do things differently. Transforming our well-made plans to become a virtual conference has obviously involved introducing a de facto disruptive innovation, one that has taken us far out of our comfort zone of experience. The Organising Committee thoroughly embraced this challenge, doing everything that they could and more; I am in awe of them and of the exciting offering that they have created for COLING2020. We now have before us a rich programme of over 653 papers, 7 tutorials, and 22 workshops.

I want to take this opportunity to thank the entire Organising Committee for their extraordinary effort in helping to make this virtual COLING2020 possible. The PC Chairs (Núria Bel, Chengqing Zong) and Local Organisation Chairs (Leo Wanner, Horacio Saggion, Mónica Domínguez) bore the brunt of the organisational burden and worked tirelessly despite the other unexpected demands to their professional and personal lives. Enormous efforts were made by Workshop Chairs (Xiaodan Zhu, Preslav Nakov, Jun Zhao), Tutorial Chairs (Lucia Specia, Daniel Beck), the Chairs of the Industry Session (Ann Clifton, Courtney Napoles), Demo Chairs (Michał Ptaszynski, Bartosz Ziolkowski), Website Chairs (Laura Pérez-Mayos, Amita Misra), Publication Chairs (Derek F. Wong, Yang Zhang, Liang Huang), Publicity Chairs (Ted Pedersen, Anna Rogers, Ghazaleh Kazeminejad), Sponsorship Chairs (Feiyu Xu, Alexander Löser, Jose Manuel Gómez Pérez), Virtual Infrastructure Chairs (Paul Piwek, Lluís Padró Cirera, Luis Espinosa Anke), Virtual Social Chair (Esther Seyffarth), and Local Support (Joana Clotet). The Programme Committee received excellent advice from an Ethics Advisory Group (Tim Baldwin, Amanda Stent, Emily Bender, Dirk Hovy, Ted Pedersen, Pascale Fung, Saif Mohammad).

I could not have wished for a better or more dedicated team to work alongside.

I would also like to thank our generous sponsors: Lenovo, SAP, Baidu, Bloomberg, Zalando, AIRC, Expert.ai, Amazon, and Grammarly. The support of Universitat Pompeu Fabra in Barcelona was also key to the success of the conference.

Last but not least, I would like to thank each and every one of you for making COLING'2020 such a success by submitting papers and demos, serving as area chairs and reviewers, invited speakers and panellists, and by joining us in this exciting new virtual environment.

Donia Scott

General Chair of COLING2020

Preface: Program Chairs

Welcome to the 28th International Conference on Computational Linguistics (COLING'2020)! COLING'2020 is very different from the past conferences. We say it is different, not only because of the spread of COVID-19 pandemic and associated worldwide travel restrictions. COLING'2020 is the first ever virtual conference in its history, but also COLING'2020 set a new record of the number of submissions in the history of COLING, even in such an unfavorable environment: 2,195 submissions to the main conference. This is really an exciting number! Of these, about 1,950 were reviewed and 614 regular papers have been accepted. The breakdown by paper type is 33.4% acceptance for regular papers, 35.3% for long papers and 26.2% for short papers. We are really delighted to witness the development and prosperity of our community.

We are very grateful for the great support and contributions from many people around the world. Their efforts and help make COLING'2020 memorable and extraordinary. First and foremost, we thank all authors for their submissions and commendable studies! We congratulate all authors whose papers are accepted in the conference and also hope that the authors of those papers which were not accepted will benefit from the feedback from reviewers. We also thank the 1529 reviewers who have put in the time and effort to carefully assess and discuss each submission. We are extremely grateful to the 51 area chairs, who led the reviewing process and reviewer discussions, and sent us detailed recommendation reports of all submissions.

We would like to thank all the members of the organizing committee who have helped us in various ways and different stages during the conference organization – the General Chair, Donia Scott; the Local Organization Committee Co-chairs, Leo Wanner, Horacio Saggion, Mónica Domínguez; the Publication Co-chairs, Derek F. Wong, Yang Zhao, Liang Huang; the Ethics Advisory Group, Tim Baldwin, Amanda Stent, Emily Bender, Dirk Hovy, Ted Pedersen, Pascale Fung, Saif M. Mohammad; the Local Support, Joana Clotet. We are very grateful to the five invited keynote speakers: Amanda Stent from Bloomberg, Harald Baayen from Eberhard Karls Universität, Margaret Mitchell from Google, Monica Lam from Stanford University, and Tal Linzen from New York University. They overcame the trouble of time difference and gave wonderfully inspiring keynote addresses to the conference! We would also like to extend our thanks to the best paper selection committee members, who are Joakim Nivre, Martha Palmer, Donia Scott, Yuji Matsumoto and Xiaodan Zhu. There are also many other colleagues who contributed their time, expertise and advice in helping us plan and manage the conference – far to many to list; without their great help and efforts, we would certainly have experienced more difficulties and troubles. We express our deep gratitude to all of them!

Welcome and hope you enjoy the new conference experience!

Nuria Bel, University Pompeu Fabra

Chengqing Zong, Institute of Automation, Chinese Academy of Sciences

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Invited Speakers

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Harald Baayen, Eberhard Karls Universität
Margaret Mitchell, Google
Monica Lam, Stanford University
Tal Linzen, New York University

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Conference Program

Tuesday, December 8, 2020

14:00–14:30 **OPENING**

14:30–15:30 **Session INV1: Live INVITED SPEAKER Harald Baayen**

15:30–16:00 **Session LONG1: Language Modelling 1**

15:30–15:36 *Exploring Controllable Text Generation Techniques*
Shrimai Prabhumoye, Alan W Black and Ruslan Salakhutdinov

15:36–15:42 *Infusing Sequential Information into Conditional Masked Translation Model with Self-Review Mechanism*
Pan Xie, Zhi Cui, Xiuying Chen, XiaoHui Hu, Jianwei Cui and Bin Wang

15:42–15:48 *Building Hierarchically Disentangled Language Models for Text Generation with Named Entities*
Yash Agarwal, Devansh Batra and Ganesh Bagler

15:48–15:54 *CharBERT: Character-aware Pre-trained Language Model*
Wentao Ma, Yiming Cui, Chenglei Si, Ting Liu, Shijin Wang and Guoping Hu

15:54–16:00 *A Graph Representation of Semi-structured Data for Web Question Answering*
xingyao zhang, Linjun Shou, Jian Pei, Ming Gong, Lijie Wen and Daxin Jiang

Tuesday, December 8, 2020 (continued)

15:30–16:00 Session LONG2: Information Extraction 1

- 15:30–15:36 *Catching Attention with Automatic Pull Quote Selection*
Tanner Bohn and Charles Ling
- 15:36–15:42 *MZET: Memory Augmented Zero-Shot Fine-grained Named Entity Typing*
Tao Zhang, Congying Xia, Chun-Ta Lu and Philip Yu
- 15:42–15:48 *Span-based Joint Entity and Relation Extraction with Attention-based Span-specific and Contextual Semantic Representations*
bin ji, Jie Yu, Shasha Li, Jun Ma, Qingbo Wu, Yusong Tan and Huijun Liu
- 15:48–15:54 *Hierarchical Chinese Legal event extraction via Pedal Attention Mechanism*
Shirong Shen, Guilin Qi, Zhen Li, Sheng Bi and Lusheng Wang
- 15:54–16:00 *Is Killed More Significant than Fled? A Contextual Model for Salient Event Detection*
Disha Jindal, Daniel Deutsch and Dan Roth

15:30–16:00 Session POSTER1: Sentiment and Emotion. Posters

- 15:30–16:00 *Appraisal Theories for Emotion Classification in Text*
Jan Hofmann, Enrica Troiano, Kai Sassenberg and Roman Klinger
- 15:30–16:00 *A Symmetric Local Search Network for Emotion-Cause Pair Extraction*
Zifeng Cheng, Zhiwei Jiang, Yafeng Yin, Hua Yu and Qing Gu
- 15:30–16:00 *Jointly Learning Aspect-Focused and Inter-Aspect Relations with Graph Convolutional Networks for Aspect Sentiment Analysis*
Bin Liang, Rongdi Yin, Lin Gui, Jiachen Du and Ruifeng Xu
- 15:30–16:00 *METNet: A Mutual Enhanced Transformation Network for Aspect-based Sentiment Analysis*
Bin Jiang, Jing Hou, Wanyue Zhou, Chao Yang, Shihan Wang and Liang Pang
- 15:30–16:00 *Making the Best Use of Review Summary for Sentiment Analysis*
Sen Yang, Leyang Cui, Jun Xie and Yue Zhang

Tuesday, December 8, 2020 (continued)

- 15:30–16:00 *From Sentiment Annotations to Sentiment Prediction through Discourse Augmentation*
Patrick Huber and Giuseppe Carenini
- 15:30–16:00 *End-to-End Emotion-Cause Pair Extraction with Graph Convolutional Network*
Ying Chen, Wenjun Hou, Shoushan Li, Caicong Wu and Xiaoqiang Zhang
- 15:30–16:00 *A Unified Sequence Labeling Model for Emotion Cause Pair Extraction*
Xinhong Chen, Qing Li and Jianping Wang
- 15:30–16:00 *Regrexit or not Regrexit: Aspect-based Sentiment Analysis in Polarized Contexts*
Vorakit Vorakitphan, Marco Guerini, Elena Cabrio and Serena Villata
- 15:30–16:00 *Affective and Contextual Embedding for Sarcasm Detection*
Nastaran Babanejad, Heidar Davoudi, Aijun An and Manos Papagelis
- 15:30–16:00 *Understanding Pre-trained BERT for Aspect-based Sentiment Analysis*
Hu Xu, Lei Shu, Philip Yu and Bing Liu
- 15:30–16:00 *Weighed Domain-Invariant Representation Learning for Cross-domain Sentiment Analysis*
Minlong Peng and Qi Zhang
- 15:30–16:00 *Improving Sentiment Analysis over non-English Tweets using Multilingual Transformers and Automatic Translation for Data-Augmentation*
Valentin Barriere and Alexandra Balahur
- 15:30–16:00 *Joint Aspect Extraction and Sentiment Analysis with Directional Graph Convolutional Networks*
Guimin Chen, Yuanhe Tian and Yan Song

Tuesday, December 8, 2020 (continued)

16:00–16:30 Session IND1: INDUSTRY TRACK: Dialogue

- 16:00–16:06 *Evaluating Cross-Lingual Transfer Learning Approaches in Multilingual Conversational Agent Models*
Lizhen Tan and Olga Golovneva
- 16:06–16:12 *Data-Efficient Paraphrase Generation to Bootstrap Intent Classification and Slot Labeling for New Features in Task-Oriented Dialog Systems*
Shailza Jolly, Tobias Falke, Caglar Tirkaz and Daniil Sorokin
- 16:12–16:18 *Leveraging User Paraphrasing Behavior In Dialog Systems To Automatically Collect Annotations For Long-Tail Utterances*
Tobias Falke, Markus Boese, Daniil Sorokin, Caglar Tirkaz and Patrick Lehnen
- 16:18–16:24 *Query Distillation: BERT-based Distillation for Ensemble Ranking*
Wangshu Zhang, Junhong Liu, Zujie Wen, Yafang Wang and Gerard de Melo
- 16:24–16:30 *Semantic Diversity for Natural Language Understanding Evaluation in Dialog Systems*
Enrico Palumbo, Andrea Mezzalana, Cristina Marco, Alessandro Manzotti and Daniele Amberti

16:00–16:30 Session ROADMAPS 1: INDUSTRY ROADMAPS 1

16:00–16:30 Session POSTER2: Applications. Posters

- 16:00–16:30 *Train Once, and Decode As You Like*
Chao Tian, Yifei Wang, Hao Cheng, Yijiang Lian and Zhihua Zhang
- 16:00–16:30 *A Representation Learning Approach to Animal Biodiversity Conservation*
Meet Mukadam, Mandhara Jayaram and Yongfeng Zhang
- 16:00–16:30 *Integrating External Event Knowledge for Script Learning*
Shangwen Lv, Fuqing Zhu and Songlin Hu
- 16:00–16:30 *Pointing to Subwords for Generating Function Names in Source Code*
Shogo Fujita, Hidetaka Kamigaito, Hiroya Takamura and Manabu Okumura
- 16:00–16:30 *Heterogeneous Graph Neural Networks to Predict What Happen Next*
Jianming Zheng, Fei Cai, Yanxiang Ling and Honghui Chen

Tuesday, December 8, 2020 (continued)

- 16:00–16:30 *CEREC: A Corpus for Entity Resolution in Email Conversations*
Parag Pravin Dakle and Dan Moldovan
- 16:00–16:30 *SQL Generation via Machine Reading Comprehension*
ZEYU YAN, Jianqiang Ma, Yang Zhang and Jianping Shen
- 16:00–16:30 *Towards Privacy by Design in Learner Corpora Research: A Case of On-the-fly Pseudonymization of Swedish Learner Essays*
Elena Volodina, Yousuf Ali Mohammed, Sandra Derbring, Arild Matsson and Beata Megyesi
- 16:00–16:30 *PG-GSQL: Pointer-Generator Network with Guide Decoding for Cross-Domain Context-Dependent Text-to-SQL Generation*
Huajie Wang, Mei Li and Lei Chen
- 16:00–16:30 *Neural Approaches for Natural Language Interfaces to Databases: A Survey*
Radu Cristian Alexandru Iacob, Florin Brad, Elena-Simona APOSTOL, Ciprian-Octavian Truică, Ionel Alexandru Hosu and Traian Rebedea
- 16:00–16:30 *Predicting Stance Change Using Modular Architectures*
Aldo Porco and Dan Goldwasser
- 16:00–16:30 *Leveraging HTML in Free Text Web Named Entity Recognition*
Colin Ashby and David Weir
- 16:00–16:30 *Multimodal Review Generation with Privacy and Fairness Awareness*
Xuan-Son Vu, Thanh-Son Nguyen, Duc-Trong Le and Lili Jiang
- 16:00–16:30 *Generating Equation by Utilizing Operators : GEO model*
Kyung Seo Ki, Donggeon Lee, Bugeun Kim and Gahgene Gweon

Tuesday, December 8, 2020 (continued)

16:30–17:00 Session LONG3: Dialogue 1

16:30–16:36 *Improving Abstractive Dialogue Summarization with Graph Structures and Topic Words*
Lulu Zhao, Weiran Xu and Jun Guo

16:36–16:42 *Speaker-change Aware CRF for Dialogue Act Classification*
Guokan Shang, Antoine Tixier, Michalis Vazirgiannis and Jean-Pierre Lorré

16:42–16:48 *LAVA: Latent Action Spaces via Variational Auto-encoding for Dialogue Policy Optimization*
Nurul Lubis, Christian Geishauser, Michael Heck, Hsien-chin Lin, Marco Moresi, Carel van Niekerk and Milica Gasic

16:48–16:54 *Recent Neural Methods on Slot Filling and Intent Classification for Task-Oriented Dialogue Systems: A Survey*
Samuel Louvan and Bernardo Magnini

16:54–17:00 *Re-framing Incremental Deep Language Models for Dialogue Processing with Multi-task Learning*
Morteza Rohanian and Julian Hough

16:30–17:00 Session LONG4: Information Extraction 2

16:30–16:36 *AprilE: Attention with Pseudo Residual Connection for Knowledge Graph Embedding*
Yuzhang Liu, Peng Wang, Yingtai Li, Yizhan Shao and Zhongkai Xu

16:36–16:42 *Variational Autoencoder with Embedded Student-t Mixture Model for Authorship Attribution*
Benedikt Boenninghoff, Steffen Zeiler, Robert Nickel and Dorothea Kolossa

16:42–16:48 *Knowledge Graph Embeddings in Geometric Algebras*
Chengjin Xu, Mojtaba Nayyeri, Yung-Yu Chen and Jens Lehmann

16:48–16:54 *Exploiting Node Content for Multiview Graph Convolutional Network and Adversarial Regularization*
Qiu hao Lu, Nisansa de Silva, Dejing Dou, Thien Huu Nguyen, Prithviraj Sen, Berthold Reinwald and Yunyao Li

16:54–17:00 *RatE: Relation-Adaptive Translating Embedding for Knowledge Graph Completion*
Hao Huang, Guodong Long, Tao Shen, Jing Jiang and Chengqi Zhang

Tuesday, December 8, 2020 (continued)

16:30–17:00 Session LONG5: Sentiment Analysis 1

- 16:30–16:36 *SentiX: A Sentiment-Aware Pre-Trained Model for Cross-Domain Sentiment Analysis*
Jie Zhou, Junfeng Tian, Rui Wang, Yuanbin Wu, Wenming Xiao and liang he
- 16:36–16:42 *Bayes-enhanced Lifelong Attention Networks for Sentiment Classification*
Hao Wang, Shuai Wang, Sahisnu Mazumder, Bing Liu, Yan Yang and Tianrui Li
- 16:42–16:48 *Arabizi Language Models for Sentiment Analysis*
Gaétan Baert, Souhir Gahbiche, Guillaume Gadek and Alexandre Pauchet
- 16:48–16:54 *Author's Sentiment Prediction*
Mohaddeseh Bastan, Mahnaz Koupaee, Youngseo Son, Richard Sicoli and Niranjana Balasubramanian
- 16:54–17:00 *Modeling Local Contexts for Joint Dialogue Act Recognition and Sentiment Classification with Bi-channel Dynamic Convolutions*
Jingye Li, Hao Fei and Donghong Ji

16:30–17:00 Session POSTER3: Applications: Biomedical, Health Records and Medical Texts. Posters

- 16:30–17:00 *Named Entity Recognition for Chinese biomedical patents*
Yuting Hu and Suzan Verberne
- 16:30–17:00 *Learning Health-Bots from Training Data that was Automatically Created using Paraphrase Detection and Expert Knowledge*
Anna Liednikova, Philippe Jolivet, Alexandre Durand-Salmon and Claire Gardent
- 16:30–17:00 *A Joint Learning Approach based on Self-Distillation for Keyphrase Extraction from Scientific Documents*
Tuan Lai, Trung Bui, Doo Soon Kim and Quan Hung Tran
- 16:30–17:00 *Enhancing Clinical BERT Embedding using a Biomedical Knowledge Base*
Boran Hao, Henghui Zhu and Ioannis Paschalidis
- 16:30–17:00 *TIMBERT: Toponym Identifier For The Medical Domain Based on BERT*
MohammadReza Davari, Leila Kosseim and Tien Bui

Tuesday, December 8, 2020 (continued)

16:30–17:00 *BioMedBERT: A Pre-trained Biomedical Language Model for QA and IR*
SOURADIP CHAKRABORTY, Ekaba Bisong, Shweta Bhatt, Thomas Wagner, Riley Elliott and Francesco Mosconi

16:30–17:00 *Extracting Adherence Information from Electronic Health Records*
Jordan Sanders, Meghana Gudala, Kathleen Hamilton, Nishtha Prasad, Jordan Stovall, Eduardo Blanco, Jane E Hamilton and Kirk Roberts

16:30–17:00 *Identifying Depressive Symptoms from Tweets: Figurative Language Enabled Multitask Learning Framework*
Shweta Yadav, Jainish Chauhan, Joy Prakash Sain, Krishnaprasad Thirunarayan, Amit Sheth and Jeremiah Schumm

16:30–17:00 *French Biomedical Text Simplification: When Small and Precise Helps*
Rémi Cardon and Natalia Grabar

16:30–17:00 *Summarizing Medical Conversations via Identifying Important Utterances*
Yan Song, Yuanhe Tian, Nan Wang and Fei Xia

17:00–17:30 Session LONG6: Language Modelling 2

17:00–17:06 *Probing Multimodal Embeddings for Linguistic Properties: the Visual-Semantic Case*
Adam Dahlgren Lindström, Johanna Björklund, Suna Bensch and Frank Drewes

17:06–17:12 *Linguistic Profiling of a Neural Language Model*
Alessio Miaschi, Dominique Brunato, Felice Dell’Orletta and Giulia Venturi

17:12–17:18 *IndoLEM and IndoBERT: A Benchmark Dataset and Pre-trained Language Model for Indonesian NLP*
Fajri Koto, Afshin Rahimi, Jey Han Lau and Timothy Baldwin

17:18–17:24 *A Closer Look at Linguistic Knowledge in Masked Language Models: The Case of Relative Clauses in American English*
Marius Mosbach, Stefania Degaetano-Ortlieb, Marie-Pauline Krielke, Badr M. Abdullah and Dietrich Klakow

17:24–17:30 *Modeling language evolution and feature dynamics in a realistic geographic environment*
Rhea Kapur and Phillip Rogers

Tuesday, December 8, 2020 (continued)

17:00–17:30 Session LONG7: Sentiment Analysis 2

17:00–17:06 *Syntax-Aware Graph Attention Network for Aspect-Level Sentiment Classification*

Lianzhe Huang, Xin Sun, Sujian Li, Linhao Zhang and Houfeng Wang

17:06–17:12 *Attention Transfer Network for Aspect-level Sentiment Classification*

Fei Zhao, Zhen Wu and Xinyu Dai

17:12–17:18 *Label Correction Model for Aspect-based Sentiment Analysis*

Qianlong Wang and Jiangtao Ren

17:18–17:24 *Aspect-Category based Sentiment Analysis with Hierarchical Graph Convolutional Network*

Hongjie Cai, Yaofeng Tu, Xiangsheng Zhou, Jianfei Yu and Rui Xia

17:24–17:30 *Constituency Lattice Encoding for Aspect Term Extraction*

Yunyi Yang, Kun Li, Xiaojun Quan, Weizhou Shen and Qinliang Su

17:00–17:30 Session LONG8: Applications 1

17:00–17:06 *A Corpus for Argumentative Writing Support in German*

Thiemo Wambsganss, Christina Niklaus, Matthias Söllner, Siegfried Handschuh and Jan Marco Leimeister

17:06–17:12 *Do Word Embeddings Capture Spelling Variation?*

Dong Nguyen and Jack Grieve

17:12–17:18 *Don't take "nswvtvakgxp" for an answer –The surprising vulnerability of automatic content scoring systems to adversarial input*

Yuning Ding, Brian Riordan, Andrea Horbach, Aoife Cahill and Torsten Zesch

17:18–17:24 *Automated Prediction of Examinee Proficiency from Short-Answer Questions*

Le An Ha, Victoria Yaneva, Polina Harik, Ravi Pandian, Amy Morales and Brian Clauser

17:24–17:30 *Exploring Cross-sentence Contexts for Named Entity Recognition with BERT*

Jouni Luoma and Sampo Pyysalo

Tuesday, December 8, 2020 (continued)

17:00–17:30 Session POSTER4: Applications: Legal, Financial, Business, Humanities. Posters

- 17:00–17:30 *Cross-lingual Annotation Projection in Legal Texts*
Andrea Galassi, Kasper Drazewski, Marco Lippi and Paolo Torroni
- 17:00–17:30 *Deep Learning Framework for Measuring the Digital Strategy of Companies from Earnings Calls*
Ahmed Ghanim Al-Ali, Robert Phaal and Donald Sull
- 17:00–17:30 *A Dataset and Evaluation Framework for Complex Geographical Description Parsing*
Egoitz Laparra and Steven Bethard
- 17:00–17:30 *DocBank: A Benchmark Dataset for Document Layout Analysis*
Minghao Li, Yiheng Xu, Lei Cui, Shaohan Huang, Furu Wei, Zhoujun Li and Ming Zhou
- 17:00–17:30 *Building Large-Scale English and Korean Datasets for Aspect-Level Sentiment Analysis in Automotive Domain*
Dongmin Hyun, Junsu Cho and Hwanjo Yu
- 17:00–17:30 *A High Precision Pipeline for Financial Knowledge Graph Construction*
Sarah Elhammedi, Laks V.S. Lakshmanan, Raymond Ng, Michael Simpson, Baoxing Huai, Zhefeng Wang and Lanjun Wang
- 17:00–17:30 *Financial Sentiment Analysis: An Investigation into Common Mistakes and Silver Bullets*
Frank Xing, Lorenzo Malandri, Yue Zhang and Erik Cambria
- 17:00–17:30 *Answering Legal Questions by Learning Neural Attentive Text Representation*
Phi Manh Kien, Ha-Thanh Nguyen, Ngo Xuan Bach, Vu Tran, Minh Le Nguyen and Tu Minh Phuong
- 17:00–17:30 *Joint Transformer/RNN Architecture for Gesture Typing in Indic Languages*
Emil Biju, Anirudh Sriram, Mitesh M. Khapra and Pratyush Kumar
- 17:00–17:30 *Automatic Charge Identification from Facts: A Few Sentence-Level Charge Annotations is All You Need*
Shounak Paul, Pawan Goyal and Saptarshi Ghosh
- 17:00–17:30 *Context-Aware Text Normalisation for Historical Dialects*
Maria Sukhareva

Tuesday, December 8, 2020 (continued)

- 17:00–17:30 *RuSemShift: a dataset of historical lexical semantic change in Russian*
Julia Rodina and Andrey Kutuzov
- 17:00–17:30 *Exploring Amharic Sentiment Analysis from Social Media Texts: Building Annotation Tools and Classification Models*
Seid Muhie Yimam, Hizkiel Mitiku Alemayehu, Abinew Ayele and Chris Biemann
- 17:00–17:30 *Effective Few-Shot Classification with Transfer Learning*
Aakriti Gupta, Kapil Thadani and Neil O’Hare
- 17:30–18:00 Session LONG9: Multimodal 1**
- 17:30–17:36 *SWAFN: Sentimental Words Aware Fusion Network for Multimodal Sentiment Analysis*
Minping Chen and Xia Li
- 17:36–17:42 *Multimodal Topic-Enriched Auxiliary Learning for Depression Detection*
Minghui An, Jingjing Wang, Shoushan Li and Guodong Zhou
- 17:42–17:48 *Imagining Grounded Conceptual Representations from Perceptual Information in Situated Guessing Games*
Alessandro Suglia, Antonio Vergari, Ioannis Konstas, Yonatan Bisk, Emanuele Bastianelli, Andrea Vanzo and Oliver Lemon
- 17:48–17:54 *Situated and Interactive Multimodal Conversations*
Seungwhan Moon, Satwik Kottur, Paul Crook, Ankita De, Shivani Poddar, Theodore Levin, David Whitney, Daniel Difranto, Ahmad Beirami, Eunjoon Cho, Rajen Subba and Alborz Geramifard
- 17:54–18:00 *Meet Changes with Constancy: Learning Invariance in Multi-Source Translation*
Jianfeng Liu, Ling Luo, Xiang Ao, Yan Song, Haoran Xu and Jian Ye

Tuesday, December 8, 2020 (continued)

17:30–18:00 Session LONG10: Machine Learning 1

- 17:30–17:36 *Enhancing Neural Models with Vulnerability via Adversarial Attack*
Rong Zhang, Qifei Zhou, Bo An, Weiping Li, Tong Mo and Bo Wu
- 17:36–17:42 *R-VGAE: Relational-variational Graph Autoencoder for Unsupervised Prerequisite Chain Learning*
Irene Li, Alexander Fabbri, Swapnil Hingmire and Dragomir Radev
- 17:42–17:48 *Fine-tuning BERT for Low-Resource Natural Language Understanding via Active Learning*
Daniel Grieshaber, Johannes Maucher and Ngoc Thang Vu
- 17:48–17:54 *Exploring End-to-End Differentiable Natural Logic Modeling*
Yufei Feng, Zi'ou Zheng, Quan Liu, Michael Greenspan and Xiaodan Zhu
- 17:54–18:00 *A Semantically Consistent and Syntactically Variational Encoder-Decoder Framework for Paraphrase Generation*
Wenqing Chen, Jidong Tian, Liqiang Xiao, Hao He and Yaohui Jin

17:30–18:00 Session POSTER5: Semantics 1. Posters

- 17:30–18:00 *Tiny Word Embeddings Using Globally Informed Reconstruction*
Sora Ohashi, Mao Isogawa, Tomoyuki Kajiwara and Yuki Arase
- 17:30–18:00 *Improving Word Embeddings through Iterative Refinement of Word- and Character-level Models*
Phong Ha, Shanshan Zhang, Nemanja Djuric and Slobodan Vucetic
- 17:30–18:00 *Probing Multilingual BERT for Genetic and Typological Signals*
Taraka Rama, Lisa Beinborn and Steffen Eger
- 17:30–18:00 *Learning Efficient Task-Specific Meta-Embeddings with Word Prisms*
Jingyi He, KC Tsiolis, Kian Kenyon-Dean and Jackie Chi Kit Cheung
- 17:30–18:00 *Always Keep your Target in Mind: Studying Semantics and Improving Performance of Neural Lexical Substitution*
Nikolay Arefyev, Boris Sheludko, Alexander Podolskiy and Alexander Panchenko

Tuesday, December 8, 2020 (continued)

- 17:30–18:00 *Word Embedding Binarization with Semantic Information Preservation*
Samarth Navali, Praneet Sherki, Ramesh Inturi and Vanraj Vala
- 17:30–18:00 *How Relevant Are Selectional Preferences for Transformer-based Language Models?*
Eleni Metheniti, Tim Van de Cruys and Nabil Hathout
- 17:30–18:00 *Embedding Semantic Taxonomies*
Alyssa Lees, Chris Welty, Shubin Zhao, Jacek Korycki and Sara Mc Carthy
- 17:30–18:00 *A Retrofitting Model for Incorporating Semantic Relations into Word Embeddings*
Sapan Shah, Sreedhar Reddy and Pushpak Bhattacharyya
- 17:30–18:00 *Lexical Relation Mining in Neural Word Embeddings*
Aishwarya Jadhav, Yifat Amir and Zachary Pardos
- 17:30–18:00 *A BERT-based Dual Embedding Model for Chinese Idiom Prediction*
Minghuan Tan and Jing Jiang
- 17:30–18:00 *BERT-based Cohesion Analysis of Japanese Texts*
Nobuhiro Ueda, Daisuke Kawahara and Sadao Kurohashi
- 17:30–18:00 *Schema Aware Semantic Reasoning for Interpreting Natural Language Queries in Enterprise Settings*
Jaydeep Sen, Tanaya Babiwale, Kanishk Saxena, Yash Butala, Sumit Bhatia and Karthik Sankaranarayanan

Tuesday, December 8, 2020 (continued)

18:00–18:30 Session LONG11: Semantics 1

- 18:00–18:06 *Multilingual Irony Detection with Dependency Syntax and Neural Models*
Alessandra Teresa Cignarella, Valerio Basile, Manuela Sanguinetti, Cristina Bosco,
Paolo Rosso and Farah Benamara
- 18:06–18:12 *What Can We Learn from Noun Substitutions in Revision Histories?*
Talita Anthonio and Michael Roth
- 18:12–18:18 *Specializing Unsupervised Pretraining Models for Word-Level Semantic Similarity*
Anne Lauscher, Ivan Vulić, Edoardo Maria Ponti, Anna Korhonen and Goran Glavaš
- 18:18–18:24 *Harnessing Cross-lingual Features to Improve Cognate Detection for Low-resource Languages*
Diptesh Kanojia, Raj Dabre, Shubham Dewangan, Pushpak Bhattacharyya, Gholamreza Haffari and Malhar Kulkarni
- 18:24–18:30 *Bridging the Gap in Multilingual Semantic Role Labeling: a Language-Agnostic Approach*
Simone Conia and Roberto Navigli

18:00–18:18 Session LONG12: Simplification

- 18:00–18:06 *On the Helpfulness of Document Context to Sentence Simplification*
Renliang Sun, Zhe Lin and Xiaojun Wan
- 18:06–18:12 *AutoMeTS: The Autocomplete for Medical Text Simplification*
Hoang Van, David Kauchak and GONDY Leroy
- 18:12–18:18 *Multi-Word Lexical Simplification*
Piotr Przybyła and Matthew Shardlow

Tuesday, December 8, 2020 (continued)

18:00–18:30 Session SHORT1: Machine Learning Methods. Short papers

18:00–18:03 *Exploring the zero-shot limit of FewRel*

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18:03–18:06 *A Deep Generative Distance-Based Classifier for Out-of-Domain Detection with Mahalanobis Space*

Hong Xu, Keqing He, Yuanmeng Yan, Sihong Liu, Zijun Liu and Weiran XU

18:06–18:09 *Contrastive Zero-Shot Learning for Cross-Domain Slot Filling with Adversarial Attack*

Keqing He, Jinchao Zhang, Yuanmeng Yan, Weiran XU, Cheng Niu and Jie Zhou

18:09–18:12 *DoLFIIn: Distributions over Latent Features for Interpretability*

Phong Le and Willem Zuidema

18:12–18:15 *Contextual Argument Component Classification for Class Discussions*

Luca Lugini and Diane Litman

18:15–18:18 *On the Practical Ability of Recurrent Neural Networks to Recognize Hierarchical Languages*

Satwik Bhattamishra, Kabir Ahuja and Navin Goyal

18:18–18:21 *Pre-trained Language Model Based Active Learning for Sentence Matching*

Guirong Bai, Shizhu He, Kang Liu, Jun Zhao and Zaiqing Nie

18:21–18:24 *Event-Guided Denoising for Multilingual Relation Learning*

Amith Ananthram, Emily Allaway and Kathleen McKeown

18:24–18:27 *Using a Penalty-based Loss Re-estimation Method to Improve Implicit Discourse Relation Classification*

xiao li, Yu Hong, Huibin Ruan and Zhen Huang

Tuesday, December 8, 2020 (continued)

18:00–18:30 Session POSTER6: Information Extraction and Knowledge Graphs. Posters

- 18:00–18:30 *A Review of Dataset and Labeling Methods for Causality Extraction*
Jinghang Xu, Wanli Zuo, Shining Liang and Xianglin Zuo
- 18:00–18:30 *Knowledge Graph Embedding with Atrous Convolution and Residual Learning*
Feiliang Ren, Juchen Li, Huihui Zhang, Shilei Liu, Bochao Li, Ruicheng Ming and Yujia Bai
- 18:00–18:30 *KnowDis: Knowledge Enhanced Data Augmentation for Event Causality Detection via Distant Supervision*
Xinyu Zuo, Yubo Chen, Kang Liu and Jun Zhao
- 18:00–18:30 *Graph Enhanced Dual Attention Network for Document-Level Relation Extraction*
Bo Li, Wei Ye, Zhonghao Sheng, Rui Xie, Xiangyu Xi and Shikun Zhang
- 18:00–18:30 *Joint Entity and Relation Extraction for Legal Documents with Legal Feature Enhancement*
Yanguang Chen, Yuanyuan Sun, Zhihao Yang and Hongfei LIN
- 18:00–18:30 *TPLinker: Single-stage Joint Extraction of Entities and Relations Through Token Pair Linking*
Yucheng Wang, Bowen Yu, Yueyang Zhang, Tingwen Liu, Hongsong Zhu and Limin Sun
- 18:00–18:30 *TeRo: A Time-aware Knowledge Graph Embedding via Temporal Rotation*
Chengjin Xu, Mojtaba Nayyeri, Fouad Alkhoury, Hamed Shariat Yazdi and Jens Lehmann
- 18:00–18:30 *Meta-Information Guided Meta-Learning for Few-Shot Relation Classification*
Bowen Dong, Yuan Yao, Ruobing Xie, Tianyu Gao, Xu Han, Zhiyuan Liu, Fen Lin, Leyu Lin and Maosong Sun
- 18:00–18:30 *Unsupervised Deep Language and Dialect Identification for Short Texts*
Koustava Goswami, Rajdeep Sarkar, Bharathi Raja Chakravarthi, Theodorus Fransen and John P. McCrae
- 18:00–18:30 *A Two-phase Prototypical Network Model for Incremental Few-shot Relation Classification*
Haopeng Ren, Yi Cai, Xiaofeng Chen, Guohua Wang and Qing Li
- 18:00–18:30 *Document-level Relation Extraction with Dual-tier Heterogeneous Graph*
Zhenyu Zhang, Bowen Yu, Xiaobo Shu, Tingwen Liu, Hengzhu Tang, Wang Yubin and Li Guo

Tuesday, December 8, 2020 (continued)

- 18:00–18:30 *Biased TextRank: Unsupervised Graph-Based Content Extraction*
Ashkan Kazemi, Verónica Pérez-Rosas and Rada Mihalcea
- 18:00–18:30 *Improving Long-Tail Relation Extraction with Collaborating Relation-Augmented Attention*
Yang Li, Tao Shen, Guodong Long, Jing Jiang, Tianyi Zhou and Chengqi Zhang
- 18:00–18:30 *ToHRE: A Top-Down Classification Strategy with Hierarchical Bag Representation for Distantly Supervised Relation Extraction*
Erxin Yu, Wenjuan Han, Yuan Tian and Yi Chang
- 18:00–18:30 *Unsupervised Fact Checking by Counter-Weighted Positive and Negative Evidential Paths in A Knowledge Graph*
Jiseong Kim and KEY-SUN CHOI
- 18:00–18:30 *Improving Relation Extraction with Relational Paraphrase Sentences*
Junjie Yu, Tong Zhu, Wenliang Chen, Wei Zhang and Min Zhang
- 18:30–19:00 Session SHORT2: Semantics. Short Papers**
- 18:30–18:33 *Autoencoding Improves Pre-trained Word Embeddings*
Masahiro Kaneko and Danushka Bollegala
- 18:33–18:36 *PoD: Positional Dependency-Based Word Embedding for Aspect Term Extraction*
Yichun Yin, Chenguang Wang and Ming Zhang
- 18:39–18:42 *Unequal Representations: Analyzing Intersectional Biases in Word Embeddings Using Representational Similarity Analysis*
Michael Lepori
- 18:42–18:45 *Vec2Sent: Probing Sentence Embeddings with Natural Language Generation*
Martin Kerscher and Steffen Eger
- 18:45–18:48 *Multi-Task Learning for Knowledge Graph Completion with Pre-trained Language Models*
Bosung Kim, Taesuk Hong, Youngjoong Ko and Jungyun Seo
- 18:48–18:51 *comp-syn: Perceptually Grounded Word Embeddings with Color*
Bhargav Srinivasa Desikan, Tasker Hull, Ethan Nadler, Douglas Guilbeault, Aabir Abubakar Kar, Mark Chu and Donald Ruggiero Lo Sardo

Tuesday, December 8, 2020 (continued)

18:51–18:54 *Try to Substitute: An Unsupervised Chinese Word Sense Disambiguation Method Based on HowNet*

Bairu Hou, Fanchao Qi, Yuan Zang, Xurui Zhang, Zhiyuan Liu and Maosong Sun

18:54–18:57 *Combining Event Semantics and Degree Semantics for Natural Language Inference*
Izumi Haruta, Koji Mineshima and Daisuke Bekki

18:30–19:00 Session SHORT3: Applications. Short papers

18:30–18:33 *Complaint Identification in Social Media with Transformer Networks*
Mali Jin and Nikolaos Aletras

18:33–18:36 *Syntactically Aware Cross-Domain Aspect and Opinion Terms Extraction*
Oren Pereg, Daniel Korat and Moshe Wasserblat

18:36–18:39 *A Deep Generative Approach to Native Language Identification*
Ehsan Lotfi, Iliia Markov and Walter Daelemans

18:39–18:42 *Modeling Event Saliency in Narratives via Barthes' Cardinal Functions*
Takaki Otake, Sho Yokoi, Naoya Inoue, Ryo Takahashi, Tatsuki Kuribayashi and Kentaro Inui

18:42–18:45 *Medical Knowledge-enriched Textual Entailment Framework*
Shweta Yadav, Vishal Pallagani and Amit Sheth

18:45–18:48 *Predicting Personal Opinion on Future Events with Fingerprints*
Fan Yang, Eduard Dragut and Arjun Mukherjee

18:48–18:51 *Detecting de minimis Code-Switching in Historical German Books*
Shijia Liu and David Smith

18:51–18:54 *Lin: Unsupervised Extraction of Tasks from Textual Communication*
Parth Diwanji, Hui Guo, Munindar Singh and Anup Kalia

18:54–18:57 *Connecting the Dots Between Fact Verification and Fake News Detection*
Qifei LI and Wangchunshu Zhou

Tuesday, December 8, 2020 (continued)

18:30–19:00 Session POSTER7: Multimodality. Posters

- 18:30–19:00 *Personalized Multimodal Feedback Generation in Education*
Haochen Liu, Zitao Liu, Zhongqin Wu and Jiliang Tang
- 18:30–19:00 *Reasoning Step-by-Step: Temporal Sentence Localization in Videos via Deep Rectification-Modulation Network*
Daizong Liu, Xiaoye Qu, Jianfeng Dong and Pan Zhou
- 18:30–19:00 *RIVA: A Pre-trained Tweet Multimodal Model Based on Text-image Relation for Multimodal NER*
Lin Sun, Jiquan Wang, Yindu Su, Fangsheng Weng, Yuxuan Sun, Zengwei Zheng and Yuanyi Chen
- 18:30–19:00 *Towards Knowledge-Augmented Visual Question Answering*
Maryam Ziaeefard and Freddy Lecue
- 18:30–19:00 *Visual-Textual Alignment for Graph Inference in Visual Dialog*
Tianling Jiang, Yi Ji, Chunping Liu and Hailin Shao
- 18:30–19:00 *Ad Lingua: Text Classification Improves Symbolism Prediction in Image Advertisements*
Andrey Savchenko, Anton Alekseev, Sejeong Kwon, Elena Tutubalina, Evgeny Myasnikov and Sergey Nikolenko
- 18:30–19:00 *Humans Meet Models on Object Naming: A New Dataset and Analysis*
Carina Silberer, Sina Zarri , Matthijs Westera and Gemma Boleda
- 18:30–19:00 *Encoding Lexico-Semantic Knowledge using Ensembles of Feature Maps from Deep Convolutional Neural Networks*
Steven Derby, Paul Miller and Barry Devereux
- 18:30–19:00 *Language-Driven Region Pointer Advancement for Controllable Image Captioning*
Annika Lindh, Robert Ross and John Kelleher
- 18:30–19:00 *Offensive Language Detection on Video Live Streaming Chat*
Zhiwei Gao, Shuntaro Yada, Shoko Wakamiya and Eiji Aramaki
- 18:30–19:00 *Image Caption Generation for News Articles*
Zhishen Yang and Naoaki Okazaki

Tuesday, December 8, 2020 (continued)

18:30–19:00 *CoNAN: A Complementary Neighboring-based Attention Network for Referring Expression Generation*

Jungjun Kim, Hanbin Ko and Jialin Wu

19:00–19:30 Session SOCIAL1: SOCIAL EVENT

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14:30–15:00 Session SOCIAL2: SOCIAL EVENT

15:00–15:30 Session INV2: QA INVITED SPEAKER Tal Linzen

15:30–16:00 Session LONG13: Language Generation 1

15:30–15:36 *Mark-Evaluate: Assessing Language Generation using Population Estimation Methods*

Gonçalo Mordido and Christoph Meinel

15:36–15:42 *TableGPT: Few-shot Table-to-Text Generation with Table Structure Reconstruction and Content Matching*

Heng Gong, Yawei Sun, Xiaocheng Feng, Bing Qin, Wei Bi, Xiaojiang Liu and Ting Liu

15:42–15:48 *The ApposCorpus: a new multilingual, multi-domain dataset for factual appositive generation*

Yova Kementchedjhieva, Di Lu and Joel Tetreault

15:48–15:54 *Generalized Shortest-Paths Encoders for AMR-to-Text Generation*

Lisa Jin and Daniel Gildea

15:54–16:00 *An Enhanced Knowledge Injection Model for Commonsense Generation*

Zhihao Fan, Yeyun Gong, Zhongyu Wei, Siyuan Wang, Yameng Huang, Jian Jiao, Xuanjing Huang, Nan Duan and Ruofei Zhang

Wednesday, December 9, 2020 (continued)

15:30–16:00 Session LONG14: Parsing and Segmentation

- 15:30–15:36 *Multi-grained Chinese Word Segmentation with Weakly Labeled Data*
Chen Gong, Zhenghua Li, Bowei Zou and Min Zhang
- 15:36–15:42 *KeyGames: A Game Theoretic Approach to Automatic Keyphrase Extraction*
Arnav Saxena, Mudit Mangal and Goonjan Jain
- 15:42–15:48 *Parsers Know Best: German PP Attachment Revisited*
Bich-Ngoc Do and Ines Rehbein
- 15:48–15:54 *Towards Fast and Accurate Neural Chinese Word Segmentation with Multi-Criteria Learning*
Weipeng Huang, Xingyi Cheng, Kunlong Chen, Taifeng Wang and Wei Chu
- 15:54–16:00 *Joint Chinese Word Segmentation and Part-of-speech Tagging via Multi-channel Attention of Character N-grams*
Yuanhe Tian, Yan Song and Fei Xia

15:30–16:00 Session POSTER8: Applications: Grammar Correction, Support for Language and Script Writing. Posters

- 15:30–16:00 *Taking the Correction Difficulty into Account in Grammatical Error Correction Evaluation*
Takumi Gotou, Ryo Nagata, Masato Mita and Kazuaki Hanawa
- 15:30–16:00 *Automatic Distractor Generation for Multiple Choice Questions in Standard Tests*
Zhaopeng Qiu, Xian Wu and Wei Fan
- 15:30–16:00 *Towards A Friendly Online Community: An Unsupervised Style Transfer Framework for Profanity Redaction*
Minh Tran, Yipeng Zhang and Mohammad Soleymani
- 15:30–16:00 *How Positive Are You: Text Style Transfer using Adaptive Style Embedding*
Heejin Kim and Kyung-Ah Sohn
- 15:30–16:00 *Neural text normalization leveraging similarities of strings and sounds*
Riku Kawamura, Tatsuya Aoki, Hidetaka Kamigaito, Hiroya Takamura and Manabu Okumura

Wednesday, December 9, 2020 (continued)

- 15:30–16:00 *Generating Diverse Corrections with Local Beam Search for Grammatical Error Correction*
Kengo Hotate, Masahiro Kaneko and Mamoru Komachi
- 15:30–16:00 *A Neural Local Coherence Analysis Model for Clarity Text Scoring*
Panitan Muangkammuen, Sheng Xu, Fumiyo Fukumoto, Kanda Runapongsa Saikaew and Jiyi Li
- 15:30–16:00 *Grammatical error detection in transcriptions of spoken English*
Andrew Caines, Christian Bentz, Kate Knill, Marek Rei and Paula Buttery
- 15:30–16:00 *Automatic Assistance for Academic Word Usage*
Dariush Saberi, John Lee and Jonathan James Webster
- 15:30–16:00 *Style versus Content: A distinction without a (learnable) difference?*
Somayeh Jafaritazehjani, Gwénolé Lecorvé, Damien Lolive and John Kelleher
- 15:30–16:00 *Contextualized Embeddings for Enriching Linguistic Analyses on Politeness*
Ahmad Aljanaideh, Eric Fosler-Lussier and Marie-Catherine de Marneffe
- 15:30–16:00 *Heterogeneous Recycle Generation for Chinese Grammatical Error Correction*
Charles Hinson, Hen-Hsen Huang and Hsin-Hsi Chen
- 15:30–16:00 *Improving Grammatical Error Correction with Data Augmentation by Editing Latent Representation*
Zhaohong Wan, Xiaojun Wan and Wenguang Wang

Wednesday, December 9, 2020 (continued)

16:00–16:30 Session IND2: INDUSTRY TRACK - Generation and Question Answering

16:00–16:06 *An Empirical Study on Multi-Task Learning for Text Style Transfer and Paraphrase Generation*

Pawel Bujnowski, Kseniia Ryzhova, Hyungtak Choi, Katarzyna Witkowska, Jaroslaw Piersa, Tymoteusz Krumholz and Katarzyna Beksa

16:06–16:12 *Best Practices for Data-Efficient Modeling in NLG: How to Train Production-Ready Neural Models with Less Data*

Ankit Arun, Soumya Batra, Vikas Bhardwaj, Ashwini Challa, Pinar Donmez, Peyman Heidari, Hakan Inan, Shashank Jain, Anuj Kumar, Shawn Mei, Karthik Mohan and Michael White

16:12–16:18 *Interactive Question Clarification in Dialogue via Reinforcement Learning*

Xiang Hu, Zujie Wen, Yafang Wang, Xiaolong Li and Gerard de Melo

16:18–16:24 *Towards building a Robust Industry-scale Question Answering System*

Rishav Chakravarti, Anthony Ferritto, Bhavani Iyer, Lin Pan, Radu Florian, Salim Roukos and Avi Sil

16:24–16:30 *Delexicalized Paraphrase Generation*

Boya Yu, Konstantine Arkoudas and Wael Hamza

16:00–16:30 Session DEMO1: Tools Useful in Research and Everyday Use. Demos

16:00–16:30 *An Online Readability Leveled Arabic Thesaurus*

Zhengyang Jiang, Nizar Habash and Muhamed Al Khalil

16:00–16:30 *Annobot: Platform for Annotating and Creating Datasets through Conversation with a Chatbot*

Rafał Poświata and Michał Perelkiewicz

16:00–16:30 *Arabic Curriculum Analysis*

Hamdy Mubarak, Shimaa Amer, Ahmed Abdelali and Kareem Darwish

16:00–16:30 *DART: A Lightweight Quality-Suggestive Data-to-Text Annotation Tool*

Ernie Chang, Jeriah Caplinger, Alex Marin, Xiaoyu Shen and Vera Demberg

- 16:00–16:30 *Epistolary Education in 21st Century: A System to Support Composition of E-mails by Students to Superiors in Japanese*
Kenji Ryu and Michal Ptaszynski
- 16:00–16:30 *Fast Word Predictor for On-Device Application*
Huy Tien Nguyen, Khoi Tuan Nguyen, Anh Tuan Nguyen and Thanh Lac Thi Tran
- 16:00–16:30 *MaintNet: A Collaborative Open-Source Library for Predictive Maintenance Language Resources*
Farhad Akhbardeh, Travis Desell and Marcos Zampieri
- 16:00–16:30 *TrainX – Named Entity Linking with Active Sampling and Bi-Encoders*
Tom Oberhauser, Tim Bischoff, Karl Brendel, Maluna Menke, Tobias Klatt, Amy Siu, Felix Alexander Gers and Alexander Löser
- 16:00–16:30 *XplaiNLI: Explainable Natural Language Inference through Visual Analytics*
Aikaterini-Lida Kalouli, Rita Sevastjanova, Valeria de Paiva, Richard Crouch and Mennatallah El-Assady
- 16:00–16:30 Session POSTER9: Text Generation. Posters**
- 16:00–16:30 *Cycle-Consistent Adversarial Autoencoders for Unsupervised Text Style Transfer*
Yufang Huang, Wentao Zhu, Deyi Xiong, Yiye Zhang, Changjian Hu and Feiyu Xu
- 16:00–16:30 *Ask to Learn: A Study on Curiosity-driven Question Generation*
Thomas Scialom and Jacopo Staiano
- 16:00–16:30 *Formality Style Transfer with Shared Latent Space*
Yunli Wang, Yu Wu, Lili Mou, Zhoujun Li and WenHan Chao
- 16:00–16:30 *Keep it Consistent: Topic-Aware Storytelling from an Image Stream via Iterative Multi-agent Communication*
Ruize Wang, Zhongyu Wei, Ying Cheng, Piji Li, Haijun Shan, Ji Zhang, Qi Zhang and Xuanjing Huang

Wednesday, December 9, 2020 (continued)

- 16:00–16:30 *Referring to what you know and do not know: Making Referring Expression Generation Models Generalize To Unseen Entities*
Rossana Cunha, Thiago Castro Ferreira, Adriana Pagano and Fabio Alves
- 16:00–16:30 *Topic-driven Ensemble for Online Advertising Generation*
Egor Nevezhin, Nikolay Butakov, Maria Khodorchenko, Maxim Petrov and Denis Nasonov
- 16:00–16:30 *Retrieval-Augmented Controllable Review Generation*
Jihyeok Kim, Seungtaek Choi, Reinald Kim Amplayo and Seung-won Hwang
- 16:00–16:30 *Automatic Detection of Machine Generated Text: A Critical Survey*
Ganesh Jawahar, Muhammad Abdul-Mageed and Laks Lakshmanan, V.S.
- 16:00–16:30 *A Learning-Exploring Method to Generate Diverse Paraphrases with Multi-Objective Deep Reinforcement Learning*
Mingtong Liu, Erguang Yang, Deyi Xiong, YUJIE ZHANG, Yao Meng, Changjian Hu, Jinan Xu and Yufeng Chen
- 16:00–16:30 *Curious Case of Language Generation Evaluation Metrics: A Cautionary Tale*
Ozan Caglayan, Pranava Madhyastha and Lucia Specia
- 16:00–16:30 *Facts2Story: Controlling Text Generation by Key Facts*
Eyal Orbach and Yoav Goldberg
- 16:00–16:30 *Story Generation with Rich Details*
Fangzhou Zhai, Vera Demberg and Alexander Koller
- 16:00–16:30 *Learning with Contrastive Examples for Data-to-Text Generation*
Yui Uehara, Tatsuya Ishigaki, Kasumi Aoki, Hiroshi Noji, Keiichi Goshima, Ichiro Kobayashi, Hiroya Takamura and Yusuke Miyao
- 16:00–16:30 *MedWriter: Knowledge-Aware Medical Text Generation*
Youcheng Pan, Qingcai Chen, Weihua Peng, Xiaolong Wang, Baotian Hu, Xin Liu, Junying Chen and Wenxiu Zhou
- 16:00–16:30 *Dynamic Topic Tracker for KB-to-Text Generation*
Zihao Fu, Lidong Bing, Wai Lam and Shoaib Jameel
- 16:00–16:30 *Improving Variational Autoencoder for Text Modelling with Timestep-Wise Regularisation*
Ruizhe Li, Xiao Li, Guanyi Chen and Chenghua Lin

Wednesday, December 9, 2020 (continued)

16:00–16:30 *GenWiki: A Dataset of 1.3 Million Content-Sharing Text and Graphs for Unsupervised Graph-to-Text Generation*
Zhijing Jin, Qipeng Guo, Xipeng Qiu and Zheng Zhang

16:30–17:00 Session LONG15: Dialogue and Language Generation

16:30–16:36 *Have Your Text and Use It Too! End-to-End Neural Data-to-Text Generation with Semantic Fidelity*
Hamza Harkous, Isabel Groves and Amir Saffari

16:36–16:42 *Graph-Based Knowledge Integration for Question Answering over Dialogue*
Jian Liu, Dianbo Sui, Kang Liu and Jun Zhao

16:42–16:48 *A hierarchical approach to vision-based language generation: from simple sentences to complex natural language*
Simion-Vlad Bogolin, Ioana Croitoru and Marius Leordeanu

16:48–16:54 *Sentiment Forecasting in Dialog*
Zhongqing Wang, Xiujun Zhu, Yue Zhang, Shoushan Li and Guodong Zhou

16:54–17:00 *I Know What You Asked: Graph Path Learning using AMR for Commonsense Reasoning*
Jungwoo Lim, Dongsuk Oh, Yoonna Jang, Kisu Yang and Heuseok Lim

16:30–17:00 Session LONG16: Dependency Parsing

16:30–16:36 *Bracketing Encodings for 2-Planar Dependency Parsing*
Michalina Strzyz, David Vilares and Carlos Gómez-Rodríguez

16:36–16:42 *Semi-Supervised Dependency Parsing with Arc-Factored Variational Autoencoding*
Ge Wang and Kewei Tu

16:42–16:48 *Multitask Easy-First Dependency Parsing: Exploiting Complementarities of Different Dependency Representations*
Yash Kankanampati, Joseph Le Roux, Nadi Tomeh, Dima Taji and Nizar Habash

16:48–16:54 *Context Dependent Semantic Parsing: A Survey*
Zhuang Li, Lizhen Qu and Gholamreza Haffari

Wednesday, December 9, 2020 (continued)

- 16:54–17:00 *A Survey of Unsupervised Dependency Parsing*
Wenjuan Han, Yong Jiang, Hwee Tou Ng and Kewei Tu
- 16:30–17:00 Session LONG17: Question Answering**
- 16:30–16:36 *Exploring Question-Specific Rewards for Generating Deep Questions*
Yuxi Xie, Liangming Pan, Dongzhe Wang, Min-Yen Kan and Yansong Feng
- 16:36–16:42 *CHIME: Cross-passage Hierarchical Memory Network for Generative Review Question Answering*
Junru Lu, Gabriele Pergola, Lin Gui, Binyang Li and Yulan He
- 16:42–16:48 *Improving Conversational Question Answering Systems after Deployment using Feedback-Weighted Learning*
Jon Ander Campos, Kyunghyun Cho, Arantxa Otegi, Aitor Soroa, Eneko Agirre and Gorka Azkune
- 16:48–16:54 *Modelling Long-distance Node Relations for KBQA with Global Dynamic Graph*
Xu Wang, Shuai Zhao, Jiale Han, Bo Cheng, Hao Yang, Jianchang Ao and Zhenzi Li
- 16:54–17:00 *Improving Commonsense Question Answering by Graph-based Iterative Retrieval over Multiple Knowledge Sources*
Qianglong Chen, Feng Ji, Haiqing Chen and Yin Zhang
- 16:30–17:00 Session POSTER10: Reading Comprehension and Spoken Language Understanding. Posters**
- 16:30–17:00 *A Vietnamese Dataset for Evaluating Machine Reading Comprehension*
Kiet Nguyen, Vu Nguyen, Anh Nguyen and Ngan Nguyen
- 16:30–17:00 *Improving Spoken Language Understanding by Wisdom of Crowds*
Koichiro Yoshino, Kana Ikeuchi, Katsuhito Sudoh and Satoshi Nakamura
- 16:30–17:00 *Bi-directional Cognitive Thinking Network for Machine Reading Comprehension*
Wei Peng, Yue Hu, Luxi Xing, Yuqiang Xie, Jing Yu, Yajing Sun and Xiangpeng Wei
- 16:30–17:00 *Learn with Noisy Data via Unsupervised Loss Correction for Weakly Supervised Reading Comprehension*
Xuemiao Zhang, Kun Zhou, Sirui Wang, Fuzheng Zhang, Zhongyuan Wang and Junfei Liu

Wednesday, December 9, 2020 (continued)

- 16:30–17:00 *Incorporating Syntax and Frame Semantics in Neural Network for Machine Reading Comprehension*
Shaoru Guo, Yong Guan, Ru Li, Xiaoli Li and Hongye Tan
- 16:30–17:00 *Molweni: A Challenge Multiparty Dialogues-based Machine Reading Comprehension Dataset with Discourse Structure*
Jiaqi Li, Ming Liu, Min-Yen Kan, Zihao Zheng, Zekun Wang, Wenqiang Lei, Ting Liu and Bing Qin
- 16:30–17:00 *Joint Event Extraction with Hierarchical Policy Network*
Peixin Huang, Xiang Zhao, Ryuichi Takanobu, Zhen Tan and Weidong Xiao
- 16:30–17:00 *Automated Graph Generation at Sentence Level for Reading Comprehension Based on Conceptual Graphs*
Wan-Hsuan Lin and Chun-Shien Lu
- 16:30–17:00 *ForceReader: a BERT-based Interactive Machine Reading Comprehension Model with Attention Separation*
zheng chen and kangjian wu
- 16:30–17:00 *NUT-RC: Noisy User-generated Text-oriented Reading Comprehension*
Rongtao Huang, Bowei Zou, Yu Hong, Wei Zhang, AiTi Aw and Guodong Zhou
- 16:30–17:00 *To What Degree Can Language Borders Be Blurred In BERT-based Multilingual Spoken Language Understanding?*
Quynh Do, Judith Gaspers, Tobias Roeding and Melanie Bradford
- 16:30–17:00 *Cross-lingual Machine Reading Comprehension with Language Branch Knowledge Distillation*
Junhao Liu, Linjun Shou, Jian Pei, Ming Gong, Min Yang and Daxin Jiang
- 16:30–17:00 *Neural Networks approaches focused on French Spoken Language Understanding: application to the MEDIA Evaluation Task*
Sahar Ghannay, Christophe Servan and Sophie Rosset
- 16:30–17:00 *Syntactic Graph Convolutional Network for Spoken Language Understanding*
Keqing He, Shuyu Lei, Yushu Yang, Huixing Jiang and Zhongyuan Wang
- 16:30–17:00 *Conversational Machine Comprehension: a Literature Review*
Somil Gupta, Bhanu Pratap Singh Rawat and hong yu
- 16:30–17:00 *Robust Machine Reading Comprehension by Learning Soft labels*
Zhenyu Zhao, Shuangzhi Wu, Muyun Yang, Kehai Chen and Tiejun Zhao

Wednesday, December 9, 2020 (continued)

17:00–17:30 Session LONG18: Language Generation 2

- 17:00–17:06 *Reinforced Multi-task Approach for Multi-hop Question Generation*
Deepak Gupta, Hardik Chauhan, Ravi Tej Akella, Asif Ekbal and Pushpak Bhat-
tacharyya
- 17:06–17:12 *Knowledge-enriched, Type-constrained and Grammar-guided Question Generation
over Knowledge Bases*
Sheng Bi, Xiya Cheng, Yuan-Fang Li, Yongzhen Wang and Guilin Qi
- 17:12–17:18 *Adapting a Language Model for Controlled Affective Text Generation*
Tushar Goswamy, Ishika Singh, Ahsan Barkati and Ashutosh Modi
- 17:18–17:24 *Generating Instructions at Different Levels of Abstraction*
Arne Köhn, Julia Wichlacz, Álvaro Torralba, Daniel Höller, Jörg Hoffmann and
Alexander Koller
- 17:24–17:30 *"Judge me by my size (noun), do you?" YodaLib: A Demographic-Aware Humor
Generation Framework*
Aparna Garimella, Carmen Banea, Nabil Hossain and Rada Mihalcea

17:00–17:30 Session LONG19: Morphology

- 17:00–17:06 *Does Chinese BERT Encode Word Structure?*
Yile Wang, Leyang Cui and Yue Zhang
- 17:06–17:12 *Noise Isn't Always Negative: Countering Exposure Bias in Sequence-to-Sequence
Inflection Models*
Garrett Nicolai and Miikka Silfverberg
- 17:12–17:18 *Morphologically Aware Word-Level Translation*
Paula Czarnowska, Sebastian Ruder, Ryan Cotterell and Ann Copestake
- 17:18–17:24 *Analogy Models for Neural Word Inflection*
Ling Liu and Mans Hulden
- 17:24–17:30 *Computational Modeling of Affixoid Behavior in Chinese Morphology*
Yu-Hsiang Tseng, Shu-Kai HSIEH, Pei-Yi Chen and Sara Court

Wednesday, December 9, 2020 (continued)

17:00–17:24 Session LONG20: Applications 2

17:00–17:06 *One Comment from One Perspective: An Effective Strategy for Enhancing Automatic Music Comment*
Tengfei Huo, Zhiqiang Liu, Jinchao Zhang and Jie Zhou

17:06–17:12 *A Tale of Two Linkings: Dynamically Gating between Schema Linking and Structural Linking for Text-to-SQL Parsing*
Sanxing Chen, Aidan San, Xiaodong Liu and Yangfeng Ji

17:12–17:18 *Autoregressive Affective Language Forecasting: A Self-Supervised Task*
Matthew Matero and H. Andrew Schwartz

17:18–17:24 *Solving Math Word Problems with Multi-Encoders and Multi-Decoders*
Yibin Shen and Cheqing Jin

17:00–17:30 Session POSTER11: Semantics 2. Posters

17:00–17:30 *End to End Chinese Lexical Fusion Recognition with Sememe Knowledge*
Yijiang Liu, Meishan Zhang and Donghong Ji

17:00–17:30 *Comparison by Conversion: Reverse-Engineering UCCA from Syntax and Lexical Semantics*
Daniel Hershcovich, Nathan Schneider, Dotan Dvir, Jakob Prange, Miryam de Lhoneux and Omri Abend

17:00–17:30 *Logic-guided Semantic Representation Learning for Zero-Shot Relation Classification*
Juan Li, Ruoxu Wang, Ningyu Zhang, Wen Zhang, Fan Yang and Huajun Chen

17:00–17:30 *Semantic Role Labeling with Heterogeneous Syntactic Knowledge*
Qingrong Xia, Rui Wang, Zhenghua Li, Yue Zhang and Min Zhang

17:00–17:30 *Normalizing Compositional Structures Across Graphbanks*
Lucia Donatelli, Jonas Groschwitz, Matthias Lindemann, Alexander Koller and Pia Weißenhorn

17:00–17:30 *Leveraging WordNet Paths for Neural Hypernym Prediction*
Yejin Cho, Juan Diego Rodriguez, Yifan Gao and Katrin Erk

Wednesday, December 9, 2020 (continued)

- 17:00–17:30 *When Beards Start Shaving Men: A Subject-object Resolution Test Suite for Morpho-syntactic and Semantic Model Introspection*
Patricia Fischer, Daniël de Kok and Erhard Hinrichs
- 17:00–17:30 *Modality Enriched Neural Network for Metaphor Detection*
Mingyu WAN and Baixi Xing
- 17:00–17:30 *Coordination Boundary Identification without Labeled Data for Compound Terms Disambiguation*
Yuya Sawada, Takashi Wada, Takayoshi Shibahara, Hiroki Teranishi, Shuhei Kondo, Hiroyuki Shindo, Taro Watanabe and Yuji Matsumoto
- 17:00–17:30 *Learning Semantic Correspondences from Noisy Data-text Pairs by Local-to-Global Alignments*
Feng Nie, Jinpeng Wang and Chin-Yew Lin
- 17:00–17:30 *Definition Frames: Using Definitions for Hybrid Concept Representations*
Evangelia Spiliopoulou, Artidoro Pagnoni and Eduard Hovy
- 17:00–17:30 *QANom: Question-Answer driven SRL for Nominalizations*
Ayal Klein, Jonathan Mamou, Valentina Pyatkin, Daniela Stepanov, Hangfeng He, Dan Roth, Luke Zettlemoyer and Ido Dagan
- 17:00–17:30 *Event Coreference Resolution with their Paraphrases and Argument-aware Embeddings*
Yutao Zeng, Xiaolong Jin, Saiping Guan, Jiafeng Guo and Xueqi Cheng
- 17:00–17:30 *Studying Taxonomy Enrichment on Diachronic WordNet Versions*
Irina Nikishina, Varvara Logacheva, Alexander Panchenko and Natalia Loukachevitch

Wednesday, December 9, 2020 (continued)

17:30–18:00 Session LONG21: Multimodality 2

- 17:30–17:36 *VICTR: Visual Information Captured Text Representation for Text-to-Vision Multimodal Tasks*
Caren Han, SIQU LONG, Siwen Luo, Kunze Wang and Josiah Poon
- 17:36–17:42 *Finding the Evidence: Localization-aware Answer Prediction for Text Visual Question Answering*
Wei Han, Hantao Huang and Tao Han
- 17:42–17:48 *Interactive Key-Value Memory-augmented Attention for Image Paragraph Captioning*
Chunpu Xu, Yu Li, Chengming Li, Xiang Ao, Min Yang and Jinwen Tian
- 17:48–17:54 *Geo-Aware Image Caption Generation*
Sofia Nikiforova, Tejaswini Deoskar, Denis Paperno and Yoad Winter
- 17:54–18:00 *Bridge the Gap: High-level Semantic Planning for Image Captioning*
Chenxi Yuan, Yang Bai and Chun Yuan

17:30–18:00 Session LONG22: Machine Learning 2

- 17:30–17:36 *Interactively-Propagative Attention Learning for Implicit Discourse Relation Recognition*
Huibin Ruan, Yu Hong, Yang Xu, Zhen Huang, Guodong Zhou and Min Zhang
- 17:36–17:42 *Dual Attention Model for Citation Recommendation*
Yang Zhang and Qiang Ma
- 17:42–17:48 *Dual Attention Network for Cross-lingual Entity Alignment*
Jian Sun, Yu Zhou and Chengqing Zong
- 17:48–17:54 *Task-Aware Representation of Sentences for Generic Text Classification*
Kishaloy Halder, Alan Akbik, Josip Krapac and Roland Vollgraf
- 17:54–18:00 *RANCC: Rationalizing Neural Networks via Concept Clustering*
Housam Khalifa Bashier, Mi-Young Kim and Randy Goebel

Wednesday, December 9, 2020 (continued)

17:30–18:00 Session POSTER12: Semantics 3. Posters

- 17:30–18:00 *LadaBERT: Lightweight Adaptation of BERT through Hybrid Model Compression*
Yihuan Mao, Yujing Wang, Chufan Wu, Chen Zhang, Yang Wang, Quanlu Zhang, Yaming Yang, Yunhai Tong and Jing Bai
- 17:30–18:00 *Emotion Classification by Jointly Learning to Lexiconize and Classify*
Deyu Zhou, Shuangzhi Wu, Qing Wang, Jun Xie, Zhaopeng Tu and Mu Li
- 17:30–18:00 *Multi-level Alignment Pretraining for Multi-lingual Semantic Parsing*
Bo Shao, Yeyun Gong, Weizhen Qi, Nan Duan and Xiaola Lin
- 17:30–18:00 *Transformation of Dense and Sparse Text Representations*
Wenpeng Hu, Mengyu Wang, Bing Liu, Feng Ji, Jinwen Ma and Dongyan Zhao
- 17:30–18:00 *Conception: Multilingually-Enhanced, Human-Readable Concept Vector Representations*
Simone Conia and Roberto Navigli
- 17:30–18:00 *What Does This Acronym Mean? Introducing a New Dataset for Acronym Identification and Disambiguation*
Amir Pouran Ben Veyseh, Franck Deroncourt, Quan Hung Tran and Thien Huu Nguyen
- 17:30–18:00 *Sentence Matching with Syntax- and Semantics-Aware BERT*
Tao Liu, Xin Wang, Chengguo Lv, Ranran Zhen and Guohong Fu
- 17:30–18:00 *Temporal Relations Annotation and Extrapolation Based on Semi-intervals and Boundig Relations*
Alejandro Pimentel, Gemma Bel Enguix, Gerardo Sierra Martínez and Azucena Montes
- 17:30–18:00 *Homonym normalisation by word sense clustering: a case in Japanese*
Yo Sato and Kevin Heffernan
- 17:30–18:00 *Verbal Multiword Expression Identification: Do We Need a Sledgehammer to Crack a Nut?*
Caroline Pasquer, Agata Savary, Carlos Ramisch and Jean-Yves Antoine

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18:00–18:30 Session LONG23: Semantics 2

18:00–18:06 *An Unsupervised Method for Learning Representations of Multi-word Expressions for Semantic Classification*

Robert Vacareanu, Marco A. Valenzuela-Escárcega, Rebecca Sharp and Mihai Surdeanu

18:06–18:12 *SLICE: Supersense-based Lightweight Interpretable Contextual Embeddings*

Cindy ALOUI, Carlos Ramisch, Alexis Nasr and Lucie Barque

18:12–18:18 *An Empirical Study of the Downstream Reliability of Pre-Trained Word Embeddings*

Anthony Rios and Brandon Lwowski

18:18–18:24 *Sentence Analogies: Linguistic Regularities in Sentence Embeddings*

Xunjie Zhu and Gerard de Melo

18:24–18:30 *Manifold Learning-based Word Representation Refinement Incorporating Global and Local Information*

Wenyu Zhao, Dong Zhou, LIN LI and Jinjun Chen

18:00–18:15 Session SHORT4: Scarce Data and Low Resourced Languages. Short papers

18:00–18:03 *Collective Wisdom: Improving Low-resource Neural Machine Translation using Adaptive Knowledge Distillation*

Fahimeh Saleh, Wray Buntine and Gholamreza Haffari

18:03–18:06 *Enabling Interactive Transcription in an Indigenous Community*

Eric Le Ferrand, Steven Bird and Laurent Besacier

18:06–18:09 *Optimizing Transformer for Low-Resource Neural Machine Translation*

Ali Araabi and Christof Monz

18:09–18:12 *Mixup-Transformer: Dynamic Data Augmentation for NLP Tasks*

Lichao Sun, Congying Xia, Wenpeng Yin, Tingting Liang, Philip Yu and Lifang He

18:12–18:15 *Handling Anomalies of Synthetic Questions in Unsupervised Question Answering*

Giwon Hong, Junmo Kang, Doyeon Lim and Sung-Hyon Myaeng

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18:15–18:18 *Designing Templates for Eliciting Commonsense Knowledge from Pretrained Sequence-to-Sequence Models*
Jheng-Hong Yang, Sheng-Chieh Lin, Rodrigo Nogueira, Ming-Feng Tsai, Chuan-Ju Wang and Jimmy Lin

18:18–18:21 *Towards the First Machine Translation System for Sumerian Transliterations*
Ravneet Punia, Niko Schenk, Christian Chiarcos and Émilie Pagé-Perron

18:21–18:24 *Using Bilingual Patents for Translation Training*
John Lee, Benjamin Tsou and Tianyuan Cai

18:00–18:30 Session LONG24: Speech

18:00–18:06 *Federated Learning for Spoken Language Understanding*
Zhiqi Huang, Fenglin Liu and Yuexian Zou

18:06–18:12 *Attentively Embracing Noise for Robust Latent Representation in BERT*
Gwenaelle Cunha Sergio, Dennis Singh Moirangthem and Minhoo Lee

18:12–18:18 *A Comprehensive Evaluation of Incremental Speech Recognition and Diarization for Conversational AI*
Angus Addlesee, Yanchao Yu and Arash Eshghi

18:18–18:24 *Decolonising Speech and Language Technology*
Steven Bird

18:24–18:30 *Dual-decoder Transformer for Joint Automatic Speech Recognition and Multilingual Speech Translation*
Hang Le, Juan Pino, Changhan Wang, Jiatao Gu, Didier Schwab and Laurent Besacier

Wednesday, December 9, 2020 (continued)

18:00–18:30 Session POSTER13: Machine Learning, Posters

- 18:00–18:30 *Multitask Learning-Based Neural Bridging Reference Resolution*
Juntao Yu and Massimo Poesio
- 18:00–18:30 *Improving Human-Labeled Data through Dynamic Automatic Conflict Resolution*
David Q. Sun, Hadas Kotek, Christopher Klein, Mayank Gupta, William Li and Jason D. Williams
- 18:00–18:30 *Automatic Discovery of Heterogeneous Machine Learning Pipelines: An Application to Natural Language Processing*
Suilan Estevez-Velarde, Yoan Gutiérrez, Andres Montoyo and Yudivián Almeida Cruz
- 18:00–18:30 *Distill and Replay for Continual Language Learning*
Jingyuan Sun, Shaonan Wang, Jiajun Zhang and Chengqing Zong
- 18:00–18:30 *Incorporating Noisy Length Constraints into Transformer with Length-aware Positional Encodings*
Yui Oka, Katsuki Chousa, Katsuhito Sudoh and Satoshi Nakamura
- 18:00–18:30 *Rethinking Skip Connection with Layer Normalization*
Fenglin Liu, Xuancheng Ren, Zhiyuan Zhang, Xu SUN and Yuexian Zou
- 18:00–18:30 *Specializing Word Vectors by Spectral Decomposition on Heterogeneously Twisted Graphs*
Yuanhang Ren and Ye Du
- 18:00–18:30 *Deep Inside-outside Recursive Autoencoder with All-span Objective*
Ruyue Hong, Jiong Cai and Kewei Tu
- 18:00–18:30 *Cross-Lingual Document Retrieval with Smooth Learning*
Jiapeng Liu, Xiao Zhang, Dan Goldwasser and Xiao Wang
- 18:00–18:30 *Increasing Learning Efficiency of Self-Attention Networks through Direct Position Interactions, Learnable Temperature, and Convolutional Attention*
Philipp Dufter, Martin Schmitt and Hinrich Schütze
- 18:00–18:30 *Picking BERT’s Brain: Probing for Linguistic Dependencies in Contextualized Embeddings Using Representational Similarity Analysis*
Michael Lepori and R. Thomas McCoy

Wednesday, December 9, 2020 (continued)

- 18:00–18:30 *The Devil is in the Details: Evaluating Limitations of Transformer-based Methods for Granular Tasks*
Brihi Joshi, Neil Shah, Francesco Barbieri and Leonardo Neves
- 18:00–18:30 *CoLAKE: Contextualized Language and Knowledge Embedding*
Tianxiang Sun, Yunfan Shao, Xipeng Qiu, Qipeng Guo, Yaru Hu, Xuanjing Huang and Zheng Zhang
- 18:00–18:30 *Invertible Tree Embeddings using a Cryptographic Role Embedding Scheme*
Coleman Haley and Paul Smolensky
- 18:30–19:00 Session LONG25: Semantics 3**
- 18:30–18:36 *Synonym Knowledge Enhanced Reader for Chinese Idiom Reading Comprehension*
Siyu Long, Ran Wang, Kun Tao, Jiali Zeng and Xinyu Dai
- 18:36–18:42 *Target Word Masking for Location Metonymy Resolution*
Haonan Li, Maria Vasardani, Martin Tomko and Timothy Baldwin
- 18:42–18:48 *Bridging Resolution: A Survey of the State of the Art*
Hideo Kobayashi and Vincent Ng
- 18:48–18:54 *An analysis of language models for metaphor recognition*
Arthur Neidlein, Philip Wiesenbach and Katja Markert
- 18:54–19:00 *What Meaning-Form Correlation Has to Compose With: A Study of MFC on Artificial and Natural Language*
Timothee Mickus, Timothée Bernard and Denis Paperno

Wednesday, December 9, 2020 (continued)

18:30–19:00 **Session PANEL1: PANEL 1. Should GPT-3 Have the Right to Free Speech?**

18:30–19:00 **Session POSTER14: Parsing. Posters**

18:30–19:00 *Evaluating Pretrained Transformer-based Models on the Task of Fine-Grained Named Entity Recognition*

Cedric Lothritz, Kevin Allix, Lisa Veiber, Tegawendé F. Bissyandé and Jacques Klein

18:30–19:00 *Seeing Both the Forest and the Trees: Multi-head Attention for Joint Classification on Different Compositional Levels*

Miruna Pislár and Marek Rei

18:30–19:00 *A Unifying Theory of Transition-based and Sequence Labeling Parsing*

Carlos Gómez-Rodríguez, Michalina Strzyż and David Vilares

18:30–19:00 *Unleashing the Power of Neural Discourse Parsers - A Context and Structure Aware Approach Using Large Scale Pretraining*

Grigorii Guz, Patrick Huber and Giuseppe Carenini

18:30–19:00 *Semi-supervised Domain Adaptation for Dependency Parsing via Improved Contextualized Word Representations*

Ying Li, Zhenghua Li and Min Zhang

18:30–19:00 *Data Augmentation via Subtree Swapping for Dependency Parsing of Low-Resource Languages*

Mathieu Dehouck and Carlos Gómez-Rodríguez

18:30–19:00 *Porous Lattice Transformer Encoder for Chinese NER*

Xue Mengge, Bowen Yu, Tingwen Liu, Yue Zhang, Erli Meng and Bin Wang

18:30–19:00 *Learning to Prune Dependency Trees with Rethinking for Neural Relation Extraction*

Bowen Yu, Xue Mengge, Zhenyu Zhang, Tingwen Liu, Wang Yubin and Bin Wang

18:30–19:00 *How Far Does BERT Look At: Distance-based Clustering and Analysis of BERT's Attention*

Yue Guan, Jingwen Leng, Chao Li, Quan Chen and Minyi Guo

18:30–19:00 *An Analysis of Simple Data Augmentation for Named Entity Recognition*

Xiang Dai and Heike Adel

Wednesday, December 9, 2020 (continued)

- 18:30–19:00 *Semi-supervised Autoencoding Projective Dependency Parsing*
Xiao Zhang and Dan Goldwasser
- 18:30–19:00 *Towards Instance-Level Parser Selection for Cross-Lingual Transfer of Dependency Parsers*
Robert Litschko, Ivan Vulić, Željko Agić and Goran Glavaš
- 18:30–19:00 *Learning from Non-Binary Constituency Trees via Tensor Decomposition*
Daniele Castellana and Davide Bacciu
- 18:30–19:00 *Second-Order Unsupervised Neural Dependency Parsing*
Songlin Yang, Yong Jiang, Wenjuan Han and Kewei Tu
- 19:00–19:30 Session SOCIAL3: SOCIAL EVENT**

Thursday, December 10, 2020

14:30–15:00 Session SOCIAL4: SOCIAL EVENT

15:00–15:30 Session INV3: QA INVITED SPEAKER Amanda Stent

15:30–16:00 Session LONG26: Neural Machine Translation 1

15:30–15:36 *Integrating Domain Terminology into Neural Machine Translation*
Elise Michon, Josep Crego and Jean Senellart

15:36–15:42 *Understanding the effects of word-level linguistic annotations in under-resourced neural machine translation*
V́ctor M. Śnchez-Cartagena, Juan Antonio Ṕrez-Ortiz and Felipe Śnchez-Mart́nez

15:42–15:48 *Breeding Gender-aware Direct Speech Translation Systems*
Marco Gaido, Beatrice Savoldi, Luisa Bentivogli, Matteo Negri and Marco Turchi

15:48–15:54 *Neural Machine Translation Models with Back-Translation for the Extremely Low-Resource Indigenous Language Bribri*
Isaac Feldman and Rolando Coto-Solano

15:54–16:00 *Dynamic Curriculum Learning for Low-Resource Neural Machine Translation*
Chen Xu, Bojie Hu, Yufan Jiang, Kai Feng, Zeyang Wang, shen huang, Qi Ju, Tong Xiao and Jingbo Zhu

Thursday, December 10, 2020 (continued)

15:30–16:00 Session LONG27: Computational Linguistics and Linguistic Theories 1

- 15:30–15:36 *Real-Valued Logics for Typological Universals: Framework and Application*
Tillmann Dönicke, Xiang Yu and Jonas Kuhn
- 15:36–15:42 *Comparative Probing of Lexical Semantics Theories for Cognitive Plausibility and Technological Usefulness*
António Branco, João António Rodrigues, Malgorzata Salawa, Ruben Branco and Chakaveh Saedi
- 15:42–15:48 *CxGBERT: BERT meets Construction Grammar*
Harish Tayyar Madabushi, Laurence Romain, Dagmar Divjak and Petar Milin
- 15:48–15:54 *How LSTM Encodes Syntax: Exploring Context Vectors and Semi-Quantization on Natural Text*
Chihiro Shibata, Kei Uchiumi and Daichi Mochihashi
- 15:54–16:00 *Corpus-based Identification of Verbs Participating in Verb Alternations Using Classification and Manual Annotation*
Esther Seyffarth and Laura Kallmeyer

15:30–16:00 Session POSTER15: Dialogue and Interactive Systems. Posters

- 15:30–16:00 *When and Who? Conversation Transition Based on Bot-Agent Symbiosis Learning Network*
Yipeng Yu, Ran Guan, Jie Ma, Zhuoxuan Jiang and Jingchang Huang
- 15:30–16:00 *Topic-relevant Response Generation using Optimal Transport for an Open-domain Dialog System*
Shuying Zhang, Tianyu Zhao and Tatsuya Kawahara
- 15:30–16:00 *An Iterative Emotion Interaction Network for Emotion Recognition in Conversations*
Xin Lu, Yanyan Zhao, Yang Wu, Yijian Tian, Huipeng Chen and Bing Qin
- 15:30–16:00 *PEDNet: A Persona Enhanced Dual Alternating Learning Network for Conversational Response Generation*
Bin Jiang, Wanyue Zhou, Jingxu Yang, Chao Yang, Shihan Wang and Liang Pang
- 15:30–16:00 *Dual Dynamic Memory Network for End-to-End Multi-turn Task-oriented Dialog Systems*
Jian Wang, Junhao Liu, Wei Bi, Xiaojiang Liu, Kejing He, Ruifeng Xu and Min Yang

Thursday, December 10, 2020 (continued)

- 15:30–16:00 *Translation vs. Dialogue: A Comparative Analysis of Sequence-to-Sequence Modeling*
Wenpeng Hu, Ran Le, Bing Liu, Jinwen Ma, Dongyan Zhao and Rui Yan
- 15:30–16:00 *Diverse dialogue generation with context dependent dynamic loss function*
Ayaka Ueyama and Yoshinobu Kano
- 15:30–16:00 *Towards Topic-Guided Conversational Recommender System*
Kun Zhou, Yuanhang Zhou, Wayne Xin Zhao, Xiaoke Wang and Ji-Rong Wen
- 15:30–16:00 *Intent Mining from past conversations for Conversational Agent*
Ajay Chatterjee and Shubhashis Sengupta
- 15:30–16:00 *Summarize before Aggregate: A Global-to-local Heterogeneous Graph Inference Network for Conversational Emotion Recognition*
Dongming Sheng, Dong Wang, Ying Shen, Haitao Zheng and Haozhuang Liu
- 15:30–16:00 *Deconstruct to Reconstruct a Configurable Evaluation Metric for Open-Domain Dialogue Systems*
Vitou Phy, Yang Zhao and Akiko Aizawa
- 15:30–16:00 *Suggest me a movie for tonight: Leveraging Knowledge Graphs for Conversational Recommendation*
Rajdeep Sarkar, Koustava Goswami, Mihael Arcan and John P. McCrae
- 15:30–16:00 *HiTrans: A Transformer-Based Context- and Speaker-Sensitive Model for Emotion Detection in Conversations*
Jingye Li, Donghong Ji, Fei Li, Meishan Zhang and Yijiang Liu
- 15:30–16:00 *A Co-Attentive Cross-Lingual Neural Model for Dialogue Breakdown Detection*
Qian Lin, Souvik Kundu and Hwee Tou Ng
- 15:30–16:00 *Integrating User History into Heterogeneous Graph for Dialogue Act Recognition*
Dong Wang, Ziran Li, Haitao Zheng and Ying Shen
- 15:30–16:00 *A Two-Level Interpretation of Modality in Human-Robot Dialogue*
Lucia Donatelli, Kenneth Lai and James Pustejovsky

Thursday, December 10, 2020 (continued)

16:00–16:33 Session IND3: INDUSTRY TRACK - Applications

16:00–16:06 *Multi-task Learning of Spoken Language Understanding by Integrating N-Best Hypotheses with Hierarchical Attention*
Mingda Li, Xinyue Liu, Weitong Ruan, Luca Soldaini, Wael Hamza and Chengwei Su

16:06–16:12 *Misspelling Detection from Noisy Product Images*
Varun Nagaraj Rao and Mingwei Shen

16:12–16:18 *hinglishNorm -A Corpus of Hindi-English Code Mixed Sentences for Text Normalization*
Piyush Makhija, Ankit Kumar and Anuj Gupta

16:18–16:24 *Assessing Social License to Operate from the Public Discourse on Social Media*
Chang Xu, Cecile Paris, Ross Sparks, Surya Nepal and Keith Vander Linden

16:24–16:30 *Extreme Model Compression for On-device Natural Language Understanding*
Kanthashree Mysore Sathyendra, Samridhi Choudhary and Leah Nicolich-Henkin

16:30–16:33 *Scalable Cross-lingual Treebank Synthesis for Improved Production Dependency Parsers*
Yousef El-Kurdi, Hiroshi Kanayama, Efsun Sarioglu Kayi, Vittorio Castelli, Todd Ward and Radu Florian

16:00–16:30 Session ROADMAPS 2: INDUSTRY ROADMAPS 2

16:00–16:30 Session POSTER16: Machine Translation. Posters

16:00–16:30 *Robust Unsupervised Neural Machine Translation with Adversarial Denoising Training*
Haipeng Sun, Rui Wang, Kehai Chen, Xugang Lu, Masao Utiyama, Eiichiro Sumita and Tiejun Zhao

16:00–16:30 *Understanding Pure Character-Based Neural Machine Translation: The Case of Translating Finnish into English*
Gongbo Tang, Rico Sennrich and Joakim Nivre

16:00–16:30 *Improving Low-Resource NMT through Relevance Based Linguistic Features Incorporation*
Abhisek Chakrabarty, Raj Dabre, Chenchen Ding, Masao Utiyama and Eiichiro Sumita

- 16:00–16:30 *Layer-Wise Multi-View Learning for Neural Machine Translation*
Qiang Wang, Changliang Li, Yue Zhang, Tong Xiao and Jingbo Zhu
- 16:00–16:30 *Bilingual Subword Segmentation for Neural Machine Translation*
Hiroyuki Deguchi, Masao Utiyama, Akihiro Tamura, Takashi Ninomiya and Ei-ichiro Sumita
- 16:00–16:30 *Token Drop mechanism for Neural Machine Translation*
Huao Zhang, Shigui Qiu, Xiangyu Duan and Min Zhang
- 16:00–16:30 *Supervised Visual Attention for Multimodal Neural Machine Translation*
Tetsuro Nishihara, Akihiro Tamura, Takashi Ninomiya, Yutaro Omote and Hideki Nakayama
- 16:00–16:30 *Investigating Catastrophic Forgetting During Continual Training for Neural Machine Translation*
Shuhao Gu and Yang Feng
- 16:00–16:30 *The Two Shades of Dubbing in Neural Machine Translation*
Alina Karakanta, Supratik Bhattacharya, Shravan Nayak, Timo Baumann, Matteo Negri and Marco Turchi
- 16:00–16:30 *Filtering Back-Translated Data in Unsupervised Neural Machine Translation*
Jyotsana Khatri and Pushpak Bhattacharyya
- 16:00–16:30 *Lost in Back-Translation: Emotion Preservation in Neural Machine Translation*
Enrica Troiano, Roman Klinger and Sebastian Padó
- 16:00–16:30 *Intermediate Self-supervised Learning for Machine Translation Quality Estimation*
Raphael Rubino and Eiichiro Sumita
- 16:00–16:30 *Unifying Input and Output Smoothing in Neural Machine Translation*
Yingbo Gao, Baohao Liao and Hermann Ney
- 16:00–16:30 *Neural Transduction for Multilingual Lexical Translation*
Dylan Lewis, Winston Wu, Arya D. McCarthy and David Yarowsky

Thursday, December 10, 2020 (continued)

16:00–16:30 *A Document-Level Neural Machine Translation Model with Dynamic Caching Guided by Theme-Rheme Information*

Yiqi Tong, Jiangbin Zheng, Hongkang Zhu, Yidong Chen and xiaodong shi

16:00–16:30 *Context-Aware Cross-Attention for Non-Autoregressive Translation*

Liang Ding, Longyue Wang, Di Wu, Dacheng Tao and Zhaopeng Tu

16:30–17:00 Session LONG28: Dialogue 2

16:30–16:36 *Does Gender Matter? Towards Fairness in Dialogue Systems*

Haochen Liu, Jamell Dacon, Wenqi Fan, Hui Liu, Zitao Liu and Jiliang Tang

16:36–16:42 *Combining Cognitive Modeling and Reinforcement Learning for Clarification in Dialogue*

Baber Khalid, Malihe Alikhani and Matthew Stone

16:42–16:48 *Knowledge Aware Emotion Recognition in Textual Conversations via Multi-Task Incremental Transformer*

Duzhen Zhang, Xiuyi Chen, Shuang Xu and Bo Xu

16:48–16:54 *MEISD: A Multimodal Multi-Label Emotion, Intensity and Sentiment Dialogue Dataset for Emotion Recognition and Sentiment Analysis in Conversations*

Mauajama Firdaus, Hardik Chauhan, Asif Ekbal and Pushpak Bhattacharyya

16:54–17:00 *EmpDG: Multi-resolution Interactive Empathetic Dialogue Generation*

Qintong Li, Hongshen Chen, Zhaochun Ren, Pengjie Ren, Zhaopeng Tu and Zhumin CHEN

Thursday, December 10, 2020 (continued)

16:30–17:00 Session LONG29: Neural Machine Translation 2

- 16:30–16:36 *Leveraging Discourse Rewards for Document-Level Neural Machine Translation*
Inigo Jauregi Unanue, Nazanin Esmaili, Gholamreza Haffari and Massimo Piccardi
- 16:36–16:42 *Effective Use of Target-side Context for Neural Machine Translation*
Hideya Mino, Hitoshi Ito, Isao Goto, Ichiro Yamada and Takenobu Tokunaga
- 16:42–16:48 *Knowledge Graph Enhanced Neural Machine Translation via Multi-task Learning on Sub-entity Granularity*
Yang Zhao, Lu Xiang, Junnan Zhu, Jiajun Zhang, Yu Zhou and Chengqing Zong
- 16:48–16:54 *Is MAP Decoding All You Need? The Inadequacy of the Mode in Neural Machine Translation*
Bryan Eikema and Wilker Aziz
- 16:54–17:00 *Domain Transfer based Data Augmentation for Neural Query Translation*
Liang Yao, Baosong Yang, Haibo Zhang, Boxing Chen and Weihua Luo

16:30–17:00 Session LONG30: Computational Linguistics and Linguistic Theories 2

- 16:30–16:36 *Living Machines: A study of atypical animacy*
Mariona Coll Ardanuy, Federico Nanni, Kaspar Beelen, Kasra Hosseini, Ruth Ahnert, Jon Lawrence, Katherine McDonough, Giorgia Tolfo, Daniel CS Wilson and Barbara McGillivray
- 16:36–16:42 *Aspectuality Across Genre: A Distributional Semantics Approach*
Thomas Kober, Malihe Alikhani, Matthew Stone and Mark Steedman
- 16:42–16:48 *Rhetoric, Logic, and Dialectic: Advancing Theory-based Argument Quality Assessment in Natural Language Processing*
Anne Lauscher, Lily Ng, Courtney Napoles and Joel Tetreault
- 16:48–16:54 *A Linguistic Perspective on Reference: Choosing a Feature Set for Generating Referring Expressions in Context*
Fahime Same and Kees van Deemter
- 16:54–17:00 *Coreference information guides human expectations during natural reading*
Evan Jaffe, Cory Shain and William Schuler

Thursday, December 10, 2020 (continued)

16:30–17:00 Session POSTERS17: Morphology and Segmentation. Posters

- 16:30–17:00 *Interactive Word Completion for Morphologically Complex Languages*
William Lane and Steven Bird
- 16:30–17:00 *Joint Persian Word Segmentation Correction and Zero-Width Non-Joiner Recognition Using BERT*
Ehsan Doostmohammadi, Mino Nassajian and Adel Rahimi
- 16:30–17:00 *Syllable-based Neural Thai Word Segmentation*
Pattarawat Chormai, Ponrawee Prasertsom, Jin Cheevaprawatdomrong and Attapol Rutherford
- 16:30–17:00 *Incorporating Inner-word and Out-word Features for Mongolian Morphological Segmentation*
Na Liu, Xiangdong Su, Haoran Zhang, Guanglai Gao and Feilong Bao
- 16:30–17:00 *Morphological disambiguation from stemming data*
Antoine Nzeyimana
- 16:30–17:00 *Revitalization of Indigenous Languages through Pre-processing and Neural Machine Translation: The case of Inuktitut*
Tan Ngoc Le and Fatiha Sadat
- 16:30–17:00 *Semi-supervised URL Segmentation with Recurrent Neural Networks Pre-trained on Knowledge Graph Entities*
Hao Zhang, Jae Ro and Richard Sproat
- 16:30–17:00 *Utilizing Subword Entities in Character-Level Sequence-to-Sequence Lemmatization Models*
Nasser Zalmout and Nizar Habash
- 16:30–17:00 *Wiktionary Normalization of Translations and Morphological Information*
Winston Wu and David Yarowsky

Thursday, December 10, 2020 (continued)

17:00–17:30 Session LONG31: Machine Translation and Transfer Learning

17:00–17:06 *Detecting Urgency Status of Crisis Tweets: A Transfer Learning Approach for Low Resource Languages*
Efsun Sarioglu Kayi, Linyong Nan, Bohan Qu, Mona Diab and Kathleen McKeown

17:06–17:12 *Cross-lingual Transfer Learning for Grammatical Error Correction*
Ikumi Yamashita, Satoru Katsumata, Masahiro Kaneko, Aizhan Imankulova and Mamoru Komachi

17:12–17:18 *Emergent Communication Pretraining for Few-Shot Machine Translation*
Yaoyiran Li, Edoardo Maria Ponti, Ivan Vulić and Anna Korhonen

17:18–17:24 *ContraCAT: Contrastive Coreference Analytical Templates for Machine Translation*
Dario Stojanovski, Benno Krojer, Denis Peskov and Alexander Fraser

17:24–17:30 *SpanAlign: Sentence Alignment Method based on Cross-Language Span Prediction and ILP*
Katsuki Chousa, Masaaki Nagata and Masaaki Nishino

17:00–17:30 Session LONG32: Evaluation

17:00–17:06 *CLUE: A Chinese Language Understanding Evaluation Benchmark*
Liang Xu, Hai Hu, Xuanwei Zhang, Lu Li, Chenjie Cao, Yudong Li, Yechen Xu, Kai Sun, Dian Yu, Cong Yu, Yin Tian, Qianqian Dong, Weitang Liu, Bo Shi, Yiming Cui, Junyi Li, Jun Zeng, Rongzhao Wang, Weijian Xie, Yanting Li, Yina Patterson, Zuoyu Tian, Yiwen Zhang, He Zhou, Shaowei Hua Liu, Zhe Zhao, Qipeng Zhao, Cong Yue, Xinrui Zhang, Zhengliang Yang, Kyle Richardson and Zhenzhong Lan

17:06–17:12 *A Human Evaluation of AMR-to-English Generation Systems*
Emma Manning, Shira Wein and Nathan Schneider

17:12–17:18 *Identifying Annotator Bias: A new IRT-based method for bias identification*
Jacopo Amidei, Paul Piwek and Alistair Willis

17:18–17:24 *Would you describe a leopard as yellow? Evaluating crowd-annotations with justified and informative disagreement*
Pia Sommerauer, Antske Fokkens and Piek Vossen

17:24–17:30 *Manual Clustering and Spatial Arrangement of Verbs for Multilingual Evaluation and Typology Analysis*
Olga Majewska, Ivan Vulić, Diana McCarthy and Anna Korhonen

Thursday, December 10, 2020 (continued)

17:00–17:30 Session LONG33: Applications 3

- 17:00–17:06 *Hierarchical Trivia Fact Extraction from Wikipedia Articles*
Jingun Kwon, Hidetaka Kamigaito, Young-In Song and Manabu Okumura
- 17:06–17:12 *Predicting Clickbait Strength in Online Social Media*
Vijayasradhi Indurthi, Bakhtiyar Syed, Manish Gupta and Vasudeva Varma
- 17:12–17:18 *GPolS: A Contextual Graph-Based Language Model for Analyzing Parliamentary Debates and Political Cohesion*
Ramit Sawhney, Arnav Wadhwa, Shivam Agarwal and Rajiv Ratn Shah
- 17:18–17:24 *Measuring Correlation-to-Causation Exaggeration in Press Releases*
Bei Yu, Jun Wang, Lu Guo and Yingya Li
- 17:24–17:30 *Inflating Topic Relevance with Ideology: A Case Study of Political Ideology Bias in Social Topic Detection Models*
Meiqi Guo, Rebecca Hwa, Yu-Ru Lin and Wen-Ting Chung

17:00–17:30 Session POSTER18: Dialogue and Understanding, Posters

- 17:00–17:30 *A Taxonomy of Empathetic Response Intents in Human Social Conversations*
Anuradha Welivita and Pearl Pu
- 17:00–17:30 *A Multitask Active Learning Framework for Natural Language Understanding*
Hua Zhu, Wu Ye, Sihan Luo and Xidong Zhang
- 17:00–17:30 *Two-level classification for dialogue act recognition in task-oriented dialogues*
Philippe Blache, Massina Abderrahmane, Stéphane Rauzy, Magalie Ochs and Houda Oufaida
- 17:00–17:30 *Balanced Joint Adversarial Training for Robust Intent Detection and Slot Filling*
Xu Cao, Deyi Xiong, Chongyang Shi, Chao Wang, Yao Meng and Changjian Hu
- 17:00–17:30 *Reasoning Requirements for Indirect Speech Act Interpretation*
Vasanth Sarathy, Alexander Tsuetaki, Antonio Roque and Matthias Scheutz

Thursday, December 10, 2020 (continued)

- 17:00–17:30 *Understanding Unnatural Questions Improves Reasoning over Text*
Xiaoyu Guo, Yuan-Fang Li and Gholamreza Haffari
- 17:00–17:30 *An Empirical Study of Contextual Data Augmentation for Japanese Zero Anaphora Resolution*
Ryuto Konno, Yuichiroh Matsubayashi, Shun Kiyono, Hiroki Ouchi, Ryo Takahashi and Kentaro Inui
- 17:00–17:30 *A Large-Scale Corpus of E-mail Conversations with Standard and Two-Level Dialogue Act Annotations*
Motoki Taniguchi, Yoshihiro Ueda, Tomoki Taniguchi and Tomoko Ohkuma
- 17:00–17:30 *Intra-/Inter-Interaction Network with Latent Interaction Modeling for Multi-turn Response Selection*
Yang Deng, Wenxuan Zhang and Wai Lam
- 17:00–17:30 *Few-shot Pseudo-Labeling for Intent Detection*
Thomas Dopierre, Christophe Gravier, Julien Subercaze and Wilfried Logerais
- 17:00–17:30 *Similarity or deeper understanding? Analyzing the TED-Q dataset of evoked questions*
Matthijs Westera, Jacopo Amidei and Laia Mayol
- 17:00–17:30 *Sentiment Analysis for Emotional Speech Synthesis in a News Dialogue System*
Hiroaki Takatsu, Ryota Ando, Yoichi Matsuyama and Tetsunori Kobayashi
- 17:00–17:30 *Adversarial Learning on the Latent Space for Diverse Dialog Generation*
Kashif Khan, Gaurav Sahu, Vikash Balasubramanian, Lili Mou and Olga Vechtomova
- 17:00–17:30 *Inconsistencies in Crowdsourced Slot-Filling Annotations: A Typology and Identification Methods*
Stefan Larson, Adrian Cheung, Anish Mahendran, Kevin Leach and Jonathan K. Kummerfeld

Thursday, December 10, 2020 (continued)

17:30–18:00 Session LONG34: Machine Translation, Quality and Evaluation

17:30–17:36 *Online Versus Offline NMT Quality: An In-depth Analysis on English-German and German-English*

Maha Elbayad, Michael Ustaszewski, Emmanuelle Esperança-Rodier, Francis Brunet-Manquat, Jakob Verbeek and Laurent Besacier

17:36–17:42 *Informative Manual Evaluation of Machine Translation Output*

Maja Popović

17:42–17:48 *TransQuest: Translation Quality Estimation with Cross-lingual Transformers*

Tharindu Ranasinghe, Constantin Orasan and Ruslan Mitkov

17:48–17:54 *Monolingual and Multilingual Reduction of Gender Bias in Contextualized Representations*

Sheng Liang, Philipp Dufter and Hinrich Schütze

17:54–18:00 *AraBench: Benchmarking Dialectal Arabic-English Machine Translation*

Hassan Sajjad, Ahmed Abdelali, Nadir Durrani and Fahim Dalvi

17:30–18:00 Session LONG35: Machine Learning 3

17:30–17:36 *Learning to Few-Shot Learn Across Diverse Natural Language Classification Tasks*

Trapit Bansal, Rishikesh Jha and Andrew McCallum

17:36–17:42 *A Mixture-of-Experts Model for Learning Multi-Facet Entity Embeddings*

Rana Alshaikh, Zied Bouraoui, Shelan Jeawak and Steven Schockaert

17:42–17:48 *Classifier Probes May Just Learn from Linear Context Features*

Jenny Kunz and Marco Kuhlmann

17:48–17:54 *Priorless Recurrent Networks Learn Curiously*

Jeff Mitchell and Jeffrey Bowers

17:54–18:00 *Answer-driven Deep Question Generation based on Reinforcement Learning*

Liuyin Wang, Zihan Xu, Zibo Lin, Haitao Zheng and Ying Shen

Thursday, December 10, 2020 (continued)

17:30–18:00 Session POSTER19: Textual Inference and Question Answering. Posters

- 17:30–18:00 *Distinguishing Between Foreground and Background Events in News*
Mohammed Aldawsari, Adrian Perez, Deya Banisakher and Mark Finlayson
- 17:30–18:00 *Pick a Fight or Bite your Tongue: Investigation of Gender Differences in Idiomatic Language Usage*
Ella Rabinovich, Hila Gonen and Suzanne Stevenson
- 17:30–18:00 *Intra-Correlation Encoding for Chinese Sentence Intention Matching*
Xu Zhang, Yifeng Li, Wenpeng Lu, Ping Jian and Guoqiang Zhang
- 17:30–18:00 *Explain by Evidence: An Explainable Memory-based Neural Network for Question Answering*
Quan Hung Tran, Nhan Dam, Tuan Lai, Franck Dernoncourt, Trung Le, Nham Le and Dinh Phung
- 17:30–18:00 *A Study on Efficiency, Accuracy and Document Structure for Answer Sentence Selection*
Daniele Bonadiman and Alessandro Moschitti
- 17:30–18:00 *Auto-Encoding Variational Bayes for Inferring Topics and Visualization*
Dang Pham and Tuan Le
- 17:30–18:00 *Hy-NLI: a Hybrid system for Natural Language Inference*
Aikaterini-Lida Kalouli, Richard Crouch and Valeria de Paiva
- 17:30–18:00 *Identifying Motion Entities in Natural Language and A Case Study for Named Entity Recognition*
Ngoc Phuoc An Vo, Irene Manotas, Vadim Sheinin and Octavian Popescu
- 17:30–18:00 *Global Context-enhanced Graph Convolutional Networks for Document-level Relation Extraction*
Huiwei Zhou, Yibin Xu, Weihong Yao, Zhe Liu, Chengkun Lang and Haibin Jiang
- 17:30–18:00 *Diverse Keyphrase Generation with Neural Unlikelihood Training*
Hareesh Bahuleyan and Layla El Asri
- 17:30–18:00 *User Memory Reasoning for Conversational Recommendation*
Hu Xu, Seungwhan Moon, Honglei Liu, Bing Liu, Pararth Shah, Bing Liu and Philip Yu

Thursday, December 10, 2020 (continued)

17:30–18:00 *Diverse and Non-redundant Answer Set Extraction on Community QA based on DPPs*

Shogo Fujita, Tomohide Shibata and Manabu Okumura

17:30–18:00 *An empirical analysis of existing systems and datasets toward general simple question answering*

Namgi Han, Goran Topic, Hiroshi Noji, Hiroya Takamura and Yusuke Miyao

17:30–18:00 *Learn to Combine Linguistic and Symbolic Information for Table-based Fact Verification*

Qi Shi, Yu Zhang, Qingyu Yin and Ting Liu

17:30–18:00 *CosMo: Conditional Seq2Seq-based Mixture Model for Zero-Shot Commonsense Question Answering*

Farhad Moghimifar, Lizhen Qu, Yue Zhuo, Mahsa Baktashmotlagh and Gholamreza Haffari

18:00–19:00 Session INV4: Live INVITED SPEAKER Monica Lam

19:00–19:30 Session SOCIAL5: SOCIAL EVENT

Friday, December 11, 2020

14:30–15:00 Session SOCIAL6: SOCIAL EVENT

15:00–15:30 Session INV5: QA INVITED SPEAKER Margaret Mitchell

15:30–16:00 Session LONG36: Summarization

15:30–15:36 *Enhancing Extractive Text Summarization with Topic-Aware Graph Neural Networks*

Peng Cui, Le Hu and Yuanchao Liu

15:36–15:42 *SaSAKE: Syntax and Semantics Aware Keyphrase Extraction from Research Papers*
T.Y.S.S Santosh, Debarshi Kumar Sanyal, Plaban Kumar Bhowmick and Partha Pratim Das

15:42–15:48 *News Editorials: Towards Summarizing Long Argumentative Texts*
Shahbaz Syed, Roxanne El Baff, Johannes Kiesel, Khalid Al Khatib, Benno Stein and Martin Potthast

15:48–15:54 *Automatic Interlinear Glossing for Under-Resourced Languages Leveraging Translations*

Xingyuan Zhao, Satoru Ozaki, Antonios Anastasopoulos, Graham Neubig and Lori Levin

15:54–16:00 *Scientific Keyphrase Identification and Classification by Pre-Trained Language Models Intermediate Task Transfer Learning*

Seoyeon Park and Cornelia Caragea

Friday, December 11, 2020 (continued)

15:30–16:00 Session LONG37: Fake News and Rumours

- 15:30–15:36 *Exploiting Microblog Conversation Structures to Detect Rumors*
Jiawen Li, Yudianto Sujana and Hung-Yu Kao
- 15:36–15:42 *Explainable Automated Fact-Checking: A Survey*
Neema Kotonya and Francesca Toni
- 15:42–15:48 *Early Detection of Fake News by Utilizing the Credibility of News, Publishers, and Users based on Weakly Supervised Learning*
Chunyuan Yuan, Qianwen Ma, Wei Zhou, Jizhong Han and Songlin Hu
- 15:48–15:54 *Debunking Rumors on Twitter with Tree Transformer*
Jing Ma and Wei Gao
- 15:54–16:00 *Words are the Window to the Soul: Language-based User Representations for Fake News Detection*
Marco Del Tredici and Raquel Fernández

15:30–16:00 Session POSTER20: Text Classification, Text Mining and Knowledge Extraction. Posters

- 15:30–16:00 *Argumentation Mining on Essays at Multi Scales*
Hao Wang, Zhen Huang, Yong Dou and Yu Hong
- 15:30–16:00 *Data Augmentation for Multiclass Utterance Classification – A Systematic Study*
Binxia Xu, Siyuan Qiu, Jie Zhang, Yafang Wang, Xiaoyu Shen and Gerard de Melo
- 15:30–16:00 *KINNEWS and KIRNEWS: Benchmarking Cross-Lingual Text Classification for Kinyarwanda and Kirundi*
Rubungo Andre Niyongabo, Qu Hong, Julia Kreutzer and Li Huang
- 15:30–16:00 *Go Simple and Pre-Train on Domain-Specific Corpora: On the Role of Training Data for Text Classification*
Aleksandra Edwards, Jose Camacho-Collados, H el ene De Ribaupierre and Alun Preece
- 15:30–16:00 *Unsupervised Fine-tuning for Text Clustering*
Shaohan Huang, Furu Wei, Lei Cui, Xingxing Zhang and Ming Zhou

Friday, December 11, 2020 (continued)

- 15:30–16:00 *Exploiting Narrative Context and A Priori Knowledge of Categories in Textual Emotion Classification*
Hikari Tanabe, Tetsuji Ogawa, Tetsunori Kobayashi and Yoshihiko Hayashi
- 15:30–16:00 *Word-Level Uncertainty Estimation for Black-Box Text Classifiers using RNNs*
Jakob Smedegaard Andersen, Tom Schöner and Walid Maalej
- 15:30–16:00 *Few-Shot Text Classification with Edge-Labeling Graph Neural Network-Based Prototypical Network*
Chen Lyu, Weijie Liu and Ping Wang
- 15:30–16:00 *ManyEnt: A Dataset for Few-shot Entity Typing*
Markus Eberts, Kevin Pech and Adrian Ulges
- 15:30–16:00 *Embedding Meta-Textual Information for Improved Learning to Rank*
Toshitaka Kuwa, Shigehiko Schamoni and Stefan Riezler
- 15:30–16:00 *Automatically Identifying Words That Can Serve as Labels for Few-Shot Text Classification*
Timo Schick, Helmut Schmid and Hinrich Schütze
- 15:30–16:00 *Knowledge Base Embedding By Cooperative Knowledge Distillation*
Raphaël Sourty, Jose G. Moreno, François-Paul Servant and Lynda Tamine-Lechani
- 15:30–16:00 *IntKB: A Verifiable Interactive Framework for Knowledge Base Completion*
Bernhard Kratzwald, Guo Kunpeng, Stefan Feuerriegel and Dennis Diefenbach

Friday, December 11, 2020 (continued)

16:00–16:30 Session IND4: INDUSTRY TRACK - Machine Learning Applications

16:00–16:06 *An Industry Evaluation of Embedding-based Entity Alignment*
Ziheng Zhang, Hualuo Liu, Jiaoyan Chen, Xi Chen, Bo Liu, YueJia Xiang and Yefeng Zheng

16:06–16:12 *Learning Domain Terms - Empirical Methods to Enhance Enterprise Text Analytics Performance*
Gargi Roy, Lipika Dey, Mohammad Shakir and Tirthankar Dasgupta

16:12–16:18 *Model-agnostic Methods for Text Classification with Inherent Noise*
Kshitij Tayal, Rahul Ghosh and Vipin Kumar

16:18–16:24 *ScopeIt: Scoping Task Relevant Sentences in Documents*
Barun Patra, Vishwas Suryanarayanan, Chala Fufa, Pamela Bhattacharya and Charles Lee

16:24–16:37 *Uncertainty Modeling for Machine Comprehension Systems using Efficient Bayesian Neural Networks*
Zhengyuan Liu, Pavitra Krishnaswamy, Ai Ti Aw and Nancy Chen

16:27–16:30 *Regularized Graph Convolutional Networks for Short Text Classification*
Kshitij Tayal, Nikhil Rao, Saurabh Agarwal, Xiaowei Jia, Karthik Subbian and Vipin Kumar

16:00–16:30 Session DEMO2: Tools with Higher Purpose (Applications of NLP in Other Areas). Demos

16:00–16:30 *A Multilingual Reading Comprehension System for more than 100 Languages*
Anthony Ferritto, Sara Rosenthal, Mihaela Bornea, Kazi Hasan, Rishav Chakravarti, Salim Roukos, Radu-Florian and Avi Sil

16:00–16:30 *BullStop: A Mobile App for Cyberbullying Prevention*
Semiu Salawu, Yulan He and Jo Lumsden

16:00–16:30 *CogniVal in Action: An Interface for Customizable Cognitive Word Embedding Evaluation*
Nora Hollenstein, Adrian van der Lek and Ce Zhang

- 16:00–16:30 *Demo Application for the AutoGOAL Framework*
 Suilan Estevez-Velarde, Alejandro Piad-Morffis, Yoan Gutiérrez, Andres Montoyo,
 Rafael Muñoz-Guillena and Yudivián Almeida Cruz
- 16:00–16:30 *Discussion Tracker: Supporting Teacher Learning about Students’ Collaborative
 Argumentation in High School Classrooms*
 Luca Lugini, Christopher Olshefski, Ravneet Singh, Diane Litman and Amanda
 Godley
- 16:00–16:30 *Semantic search with domain-specific word-embedding and production monitoring
 in Fintech*
 Mojtaba Farmanbar, Nikki Van Ommeren and Boyang Zhao
- 16:00–16:30 Session POSTER21: Summarization. Posters**
- 16:00–16:30 *Reference and Document Aware Semantic Evaluation Methods for Korean Lan-
 guage Summarization*
 Dongyub Lee, Myeong Cheol Shin, Taesun Whang, Seungwoo Cho, Byeongil Ko,
 Daniel Lee, EungGyun Kim and Jaechoon Jo
- 16:00–16:30 *At Which Level Should We Extract? An Empirical Analysis on Extractive Document
 Summarization*
 Qingyu Zhou, Furu Wei and Ming Zhou
- 16:00–16:30 *Fact-level Extractive Summarization with Hierarchical Graph Mask on BERT*
 Ruifeng Yuan, zili Wang and Wenjie Li
- 16:00–16:30 *Flight of the PEGASUS? Comparing Transformers on Few-shot and Zero-shot
 Multi-document Abstractive Summarization*
 Travis Goodwin, Max Savery and Dina Demner-Fushman
- 16:00–16:30 *WSL-DS: Weakly Supervised Learning with Distant Supervision for Query Focused
 Multi-Document Abstractive Summarization*
 Md Tahmid Rahman Laskar, Enamul Hoque and Jimmy Xiangji Huang

Friday, December 11, 2020 (continued)

- 16:00–16:30 *Multimodal Sentence Summarization via Multimodal Selective Encoding*
Haoran Li, Junnan Zhu, Jiajun Zhang, Xiaodong He and Chengqing Zong
- 16:00–16:30 *Controllable Abstractive Sentence Summarization with Guiding Entities*
Changmeng Zheng, Yi Cai, Guanjie Zhang and Qing Li
- 16:00–16:30 *HOLMS: Alternative Summary Evaluation with Large Language Models*
Yassine Mrabet and Dina Demner-Fushman
- 16:00–16:30 *How Domain Terminology Affects Meeting Summarization Performance*
Jia Jin Koay, Alexander Roustai, Xiaojin Dai, Dillon Burns, Alec Kerrigan and Fei Liu
- 16:00–16:30 *An Anchor-Based Automatic Evaluation Metric for Document Summarization*
Kexiang Wang, Tianyu Liu, Baobao Chang and Zhifang Sui
- 16:00–16:30 *Metrics also Disagree in the Low Scoring Range: Revisiting Summarization Evaluation Metrics*
Manik Bhandari, Pranav Narayan Gour, Atabak Ashfaq and Pengfei Liu
- 16:00–16:30 *On the Faithfulness for E-commerce Product Summarization*
Peng Yuan, Haoran Li, Song Xu, Youzheng Wu, Xiaodong He and Bowen Zhou
- 16:00–16:30 *SumTitles: a Summarization Dataset with Low Extractiveness*
Valentin Malykh, Konstantin Chernis, Ekaterina Artemova and Irina Piontkovskaya
- 16:00–16:30 *TWEETSUM: Event oriented Social Summarization Dataset*
Ruifang He, Liangliang Zhao and Huanyu Liu

Friday, December 11, 2020 (continued)

16:30–17:00 Session LONG38: Discourse 1

- 16:30–16:36 *Exploiting a lexical resource for discourse connective disambiguation in German*
Peter Bourgonje and Manfred Stede
- 16:36–16:42 *Chinese Paragraph-level Discourse Parsing with Global Backward and Local Reverse Reading*
Feng Jiang, Xiaomin Chu, Peifeng Li, Fang Kong and Qiaoming Zhu
- 16:42–16:48 *A Neural Model for Aggregating Coreference Annotation in Crowdsourcing*
Maolin Li, Hiroya Takamura and Sophia Ananiadou
- 16:48–16:54 *Variation in Coreference Strategies across Genres and Production Media*
Berfin Aktaş and Manfred Stede
- 16:54–17:00 *Towards automatically generating Questions under Discussion to link information and discourse structure*
Kordula De Kuthy, Madeeswaran Kannan, Haemant Santhi Ponnusamy and Detmar Meurers

16:30–17:00 Session LONG39: Classification Systems

- 16:30–16:36 *Learning to Decouple Relations: Few-Shot Relation Classification with Entity-Guided Attention and Confusion-Aware Training*
Yingyao Wang, Junwei Bao, Guangyi Liu, Youzheng Wu, Xiaodong He, Bowen Zhou and Tiejun Zhao
- 16:36–16:42 *Semi-supervised Multi-task Learning for Multi-label Fine-grained Sexism Classification*
Harika Abburi, Pulkit Parikh, Niyati Chhaya and Vasudeva Varma
- 16:42–16:48 *Using Eye-tracking Data to Predict the Readability of Brazilian Portuguese Sentences in Single-task, Multi-task and Sequential Transfer Learning Approaches*
Sidney Evaldo Leal, João Marcos Munguba Vieira, Erica dos Santos Rodrigues, Elisângela Nogueira Teixeira and Sandra Aluísio
- 16:48–16:54 *Retrieving Skills from Job Descriptions: A Language Model Based Extreme Multi-label Classification Framework*
Akshay Bhola, Kishalay Halder, Animesh Prasad and Min-Yen Kan
- 16:54–17:00 *Native-like Expression Identification by Contrasting Native and Proficient Second Language Speakers*
Oleksandr Harust, Yugo Murawaki and Sadao Kurohashi

Friday, December 11, 2020 (continued)

16:30–17:00 Session LONG40: Resources and Datasets

- 16:30–16:36 *An Analysis of Dataset Overlap on Winograd-Style Tasks*
Ali Emami, Kaheer Suleman, Adam Trischler and Jackie Chi Kit Cheung
- 16:36–16:42 *The Indigenous Languages Technology project at NRC Canada: An empowerment-oriented approach to developing language software*
Roland Kuhn, Fineen Davis, Alain Désilets, Eric Joanis, Anna Kazantseva, Rebecca Knowles, Patrick Littell, Delaney Lothian, Aidan Pine, Caroline Running Wolf, Eddie Santos, Darlene Stewart, Gilles Boulianne, Vishwa Gupta, Brian Maracle Owennatékha, Akwiratékha' Martin, Christopher Cox, Marie-Odile Junker, Olivia Sammons, Delasie Torkornoo, Nathan Thanyehténhas Brinklow, Sara Child, Benoît Farley, David Huggins-Daines, Daisy Rosenblum and Heather Souter
- 16:42–16:48 *Cross-Lingual Emotion Lexicon Induction using Representation Alignment in Low-Resource Settings*
Arun Ramachandran and Gerard de Melo
- 16:48–16:54 *Don't Patronize Me! An Annotated Dataset with Patronizing and Condescending Language towards Vulnerable Communities*
Carla Perez Almendros, Luis Espinosa Anke and Steven Schockaert
- 16:54–17:00 *100,000 Podcasts: A Spoken English Document Corpus*
Ann Clifton, Sravana Reddy, Yongze Yu, Aasish Pappu, Rezvaneh Rezapour, Hamed Bonab, Maria Eskevich, Gareth Jones, Jussi Karlgren, Ben Carterette and Rosie Jones
- 16:30–17:00 Session POSTER22: Translation, Crosslingual and Multilingual Systems. Posters**
- 16:30–17:00 *A Contextual Alignment Enhanced Cross Graph Attention Network for Cross-lingual Entity Alignment*
Zhiwen Xie, Runjie Zhu, Kunsong Zhao, Jin Liu, Guangyou Zhou and Jimmy Xiangji Huang
- 16:30–17:00 *PheMT: A Phenomenon-wise Dataset for Machine Translation Robustness on User-Generated Contents*
Ryo Fujii, Masato Mita, Kaori Abe, Kazuaki Hanawa, Makoto Morishita, Jun Suzuki and Kentaro Inui

- 16:30–17:00 *Detecting Non-literal Translations by Fine-tuning Cross-lingual Pre-trained Language Models*
Yuming Zhai, Gabriel ILLOUZ and Anne Vilnat
- 16:30–17:00 *WikiUMLS: Aligning UMLS to Wikipedia via Cross-lingual Neural Ranking*
Afshin Rahimi, Timothy Baldwin and Karin Verspoor
- 16:30–17:00 *The Transference Architecture for Automatic Post-Editing*
Santanu Pal, Hongfei Xu, Nico Herbig, Sudip Kumar Naskar, Antonio Krüger and Josef van Genabith
- 16:30–17:00 *Better Sign Language Translation with STMC-Transformer*
Kayo Yin and Jesse Read
- 16:30–17:00 *A Simple and Effective Approach to Robust Unsupervised Bilingual Dictionary Induction*
Yanyang Li, Yingfeng Luo, Ye Lin, Quan Du, Huizhen Wang, Shujian Huang, Tong Xiao and Jingbo Zhu
- 16:30–17:00 *Data Selection for Bilingual Lexicon Induction from Specialized Comparable Corpora*
Martin Laville, Amir Hazem, Emmanuel Morin and Phillippe Langlais
- 16:30–17:00 *A Locally Linear Procedure for Word Translation*
Soham Dan, Hagai Taitelbaum and Jacob Goldberger
- 16:30–17:00 *Rethinking the Value of Transformer Components*
Wenxuan Wang and Zhaopeng Tu
- 16:30–17:00 *The SADID Evaluation Datasets for Low-Resource Spoken Language Machine Translation of Arabic Dialects*
Wael Abid

Friday, December 11, 2020 (continued)

- 16:30–17:00 *Combining Word Embeddings with Bilingual Orthography Embeddings for Bilingual Dictionary Induction*
Silvia Severini, Viktor Hangya, Alexander Fraser and Hinrich Schütze
- 16:30–17:00 *Understanding Translationese in Multi-view Embedding Spaces*
Koel Dutta Chowdhury, Cristina España-Bonet and Josef van Genabith
- 16:30–17:00 *Building The First English-Brazilian Portuguese Corpus for Automatic Post-Editing*
Felipe Almeida Costa, Thiago Castro Ferreira, Adriana Pagano and Wagner Meira
- 16:30–17:00 *Analysing cross-lingual transfer in lemmatisation for Indian languages*
Kumar Saurav, Kumar Saunack and Pushpak Bhattacharyya
- 17:00–17:30 Session LONG41: Discourse 2**
- 17:00–17:06 *Neural Automated Essay Scoring Incorporating Handcrafted Features*
Masaki Uto, Yikuan Xie and Maomi Ueno
- 17:06–17:12 *A Straightforward Approach to Narratologically Grounded Character Identification*
Labiba Jahan, Rahul Mittal, W. Victor Yarlott and Mark Finlayson
- 17:12–17:18 *Fine-grained Information Status Classification Using Discourse Context-Aware BERT*
Yufang Hou
- 17:18–17:24 *Free the Plural: Unrestricted Split-Antecedent Anaphora Resolution*
Juntao Yu, Nafise Sadat Moosavi, Silviu Paun and Massimo Poesio
- 17:24–17:30 *How coherent are neural models of coherence?*
Leila Pishdad, Federico Fancellu, Ran Zhang and Afsaneh Fazly

Friday, December 11, 2020 (continued)

17:00–17:30 Session LONG42: Text Classification

17:00–17:06 *Fact vs. Opinion: the Role of Argumentation Features in News Classification*

Tariq Alhindi, Smaranda Muresan and Daniel Preotiuc-Pietro

17:06–17:12 *Generating Plausible Counterfactual Explanations for Deep Transformers in Financial Text Classification*

Linyi Yang, Eoin Kenny, Tin Lok James Ng, Yi Yang, Barry Smyth and Ruihai Dong

17:12–17:18 *Text Classification by Contrastive Learning and Cross-lingual Data Augmentation for Alzheimer’s Disease Detection*

Zhiqiang Guo, Zhaoqi Liu, Zhenhua Ling, Shijin Wang, Lingjing Jin and Yunxia Li

17:18–17:24 *Multilingual Epidemiological Text Classification: A Comparative Study*

Stephen Mutuvi, Emanuela Boros, Antoine Doucet, Adam Jatowt, Gaël Lejeune and Moses Odeo

17:24–17:30 *Pointing to Select: A Fast Pointer-LSTM for Long Text Classification*

Jinhua Du, Yan Huang and Karo Moilanen

17:00–17:30 Session LONG43: Applications 4

17:00–17:06 *Aspect-based Document Similarity for Research Papers*

Malte Ostendorff, Terry Ruas, Till Blume, Bela Gipp and Georg Rehm

17:06–17:12 *Explainable and Sparse Representations of Academic Articles for Knowledge Exploration*

Keng-Te Liao, Zhihong Shen, Chiyuan Huang, Chieh-Han Wu, PoChun Chen, Kuansan Wang and Shou-de Lin

17:12–17:18 *“What is on your mind?” Automated Scoring of Mindreading in Childhood and Early Adolescence*

Venelin Kovatchev, Phillip Smith, Mark Lee, Imogen Grumley Traynor, Irene Luque Aguilera and Rory Devine

17:18–17:24 *A Deep Metric Learning Method for Biomedical Passage Retrieval*

Andrés Rosso-Mateus, Fabio A. González and Manuel Montes-y-Gómez

17:24–17:30 *Hierarchical Text Segmentation for Medieval Manuscripts*

Amir Hazem, Beatrice Daille, Dominique Stutzmann, Christopher Kermorvant and Louis Chevalier

Friday, December 11, 2020 (continued)

17:00–17:30 Session POSTER23: Applications: Abusive Language, Bias, Fake News and Rumours Detection. Posters

17:00–17:30 *Are We Ready for this Disaster? Towards Location Mention Recognition from Crisis Tweets*

Reem Suwaileh, Muhammad Imran, Tamer Elsayed and Hassan Sajjad

17:00–17:30 *Mining Crowdsourcing Problems from Discussion Forums of Workers*

Zahra Nouri, Henning Wachsmuth and Gregor Engels

17:00–17:30 *AbuseAnalyzer: Abuse Detection, Severity and Target Prediction for Gab Posts*

Mohit Chandra, Ashwin Pathak, Eesha Dutta, Paryul Jain, Manish Gupta, Manish Shrivastava and Ponnurangam Kumaraguru

17:00–17:30 *A Survey of Automatic Personality Detection from Texts*

Sanja Stajner and Seren Yenikent

17:00–17:30 *Mama/Papa, Is this Text for Me?*

Rashedur Rahman, Gwénolé Lecorvé, Aline Étienne, Delphine Battistelli, Nicolas Béchet and Jonathan Chevelu

17:00–17:30 *Hierarchical Bi-Directional Self-Attention Networks for Paper Review Rating Recommendation*

Zhongfen Deng, Hao Peng, Congying Xia, Jianxin Li, Lifang He and Philip Yu

17:00–17:30 *Context in Informational Bias Detection*

Esther van den Berg and Katja Markert

17:00–17:30 *HateGAN: Adversarial Generative-Based Data Augmentation for Hate Speech Detection*

RUI CAO and Roy Ka-Wei Lee

17:00–17:30 *Evaluating Unsupervised Representation Learning for Detecting Stances of Fake News*

Maike Guderlei and Matthias Aßenmacher

17:00–17:30 *XHate-999: Analyzing and Detecting Abusive Language Across Domains and Languages*

Goran Glavaš, Mladen Karan and Ivan Vulić

17:00–17:30 *Detect All Abuse! Toward Universal Abusive Language Detection Models*

Kunze Wang, Dong Lu, Caren Han, SIQU LONG and Josiah Poon

Friday, December 11, 2020 (continued)

17:00–17:30 *Modeling Evolution of Message Interaction for Rumor Resolution*
Lei Chen, Zhongyu Wei, Jing Li, Baohua Zhou, Qi ZHANG and Xuanjing Huang

17:30–18:00 Session LONG44: Relation Extraction

17:30–17:36 *Regularized Attentive Capsule Network for Overlapped Relation Extraction*
Tianyi Liu, Xiangyu Lin, Weijia Jia, Mingliang Zhou and Wei Zhao

17:36–17:42 *Bridging Text and Knowledge with Multi-Prototype Embedding for Few-Shot Relational Triple Extraction*
Haiyang Yu, Ningyu Zhang, Shumin Deng, Hongbin Ye, Wei Zhang and Huajun Chen

17:42–17:48 *Dual Supervision Framework for Relation Extraction with Distant Supervision and Human Annotation*
Woohwan Jung and Kyuseok Shim

17:48–17:54 *Graph Convolution over Multiple Dependency Sub-graphs for Relation Extraction*
Angrosh Mandya, Danushka Bollegala and Frans Coenen

17:54–18:00 *Towards Accurate and Consistent Evaluation: A Dataset for Distantly-Supervised Relation Extraction*
Tong Zhu, Haitao Wang, Junjie Yu, Xiabing Zhou, Wenliang Chen, Wei Zhang and Min Zhang

17:30–18:00 Session LONG45: Inference and Comprehension

17:30–17:36 *Multi-choice Relational Reasoning for Machine Reading Comprehension*
Wuya Chen, Xiaojun Quan, Chunyu Kit, Zhengcheng Min and Jiahai Wang

17:36–17:42 *FASTMATCH: Accelerating the Inference of BERT-based Text Matching*
Shuai Pang, Jianqiang Ma, ZEYU YAN, Yang Zhang and Jianping Shen

17:42–17:48 *DT-QDC: A Dataset for Question Comprehension in Online Test*
Sijin Wu, Yujiu Yang, Nicholas Yung, Zhengchen Shen and Zeyang Lei

17:48–17:54 *Read and Reason with MuSeRC and RuCoS: Datasets for Machine Reading Comprehension for Russian*
Alena Fenogenova, Vladislav Mikhailov and Denis Shevelev

Friday, December 11, 2020 (continued)

- 17:54–18:00 *Knowledge-Enhanced Natural Language Inference Based on Knowledge Graphs*
Zikang Wang, Linjing Li and Daniel Zeng
- 17:30–18:00 Session POSTER24: Language Resources and Evaluation. Posters**
- 17:30–18:00 *NYTWIT: A Dataset of Novel Words in the New York Times*
Yuval Pinter, Cassandra L. Jacobs and Max Bittker
- 17:30–18:00 *SOME: Reference-less Sub-Metrics Optimized for Manual Evaluations of Grammatical Error Correction*
Ryoma Yoshimura, Masahiro Kaneko, Tomoyuki Kajiwara and Mamoru Komachi
- 17:30–18:00 *Continual Lifelong Learning in Natural Language Processing: A Survey*
Magdalena Biesialska, Katarzyna Biesialska and Marta R. Costa-jussà
- 17:30–18:00 *XED: A Multilingual Dataset for Sentiment Analysis and Emotion Detection*
Emily Öhman, Marc Pàmies, Kaisla Kajava and Jörg Tiedemann
- 17:30–18:00 *Human or Neural Translation?*
Shivendra Bhardwaj, David Alfonso Hermelo, Phillippe Langlais, Gabriel Bernier-Colborne, Cyril Goutte and Michel Simard
- 17:30–18:00 *Biomedical Concept Relatedness – A large EHR-based benchmark*
Claudia Schulz, Josh Levy-Kramer, Camille Van Assel, Miklos Kepes and Nils Hammerla
- 17:30–18:00 *Domain-Specific Sentiment Lexicons Induced from Labeled Documents*
SM Mazharul Islam, Xin Dong and Gerard de Melo
- 17:30–18:00 *Language ID in the Wild: Unexpected Challenges on the Path to a Thousand-Language Web Text Corpus*
Isaac Caswell, Theresa Breiner, Daan van Esch and Ankur Bapna
- 17:30–18:00 *Constructing A Multi-hop QA Dataset for Comprehensive Evaluation of Reasoning Steps*
Xanh Ho, Anh-Khoa Duong Nguyen, Saku Sugawara and Akiko Aizawa
- 17:30–18:00 *RoBERT – A Romanian BERT Model*
Mihai Masala, Stefan Ruseti and Mihai Dascalu

Friday, December 11, 2020 (continued)

- 17:30–18:00 *Exploring the Language of Data*
Gábor Bella, Linda Gremes and Fausto Giunchiglia
- 17:30–18:00 *DaN+: Danish Nested Named Entities and Lexical Normalization*
Barbara Plank, Kristian Nørgaard Jensen and Rob van der Goot
- 17:30–18:00 *New Benchmark Corpus and Models for Fine-grained Event Classification: To BERT or not to BERT?*
Jakub Piskorski, Jacek Haneczok and Guillaume Jacquet
- 17:30–18:00 *A Geometry-Inspired Attack for Generating Natural Language Adversarial Examples*
Zhao Meng and Roger Wattenhofer
- 17:30–18:00 *Expert Concept-Modeling Ground Truth Construction for Word Embeddings Evaluation in Concept-Focused Domains*
Arianna Betti, Martin Reynaert, Thijs Ossenkoppele, Yvette Oortwijn, Andrew Salway and Jelke Bloem
- 17:30–18:00 *Creation of Corpus and analysis in Code-Mixed Kannada-English Twitter data for Emotion Prediction*
Abhinav Reddy Appidi, Vamshi Krishna Srirangam, Darsi Suhas and Manish Shrivastava
- 18:00–18:30 Session PANEL2: PANEL 2**
- 18:00–18:12 Session SHORT5: Discourse, Parsing, Dialogue and Others. Short papers**
- 18:00–18:03 *Fair Evaluation in Concept Normalization: a Large-scale Comparative Analysis for BERT-based Models*
Elena Tutubalina, Artur Kadurin and Zulfat Miftahutdinov
- 18:03–18:06 *A Sentence Cloze Dataset for Chinese Machine Reading Comprehension*
Yiming Cui, Ting Liu, Ziqing Yang, Zhipeng Chen, Wentao Ma, Wanxiang Che, Shijin Wang and Guoping Hu
- 18:06–18:09 *Improving Document-Level Sentiment Analysis with User and Product Context*
Chenyang Lyu, Jennifer Foster and Yvette Graham
- 18:09–18:12 *Multilingual Neural RST Discourse Parsing*
Zhengyuan Liu, Ke Shi and Nancy Chen

Friday, December 11, 2020 (continued)

- 18:12–18:15 *Intrinsic Quality Assessment of Arguments*
Henning Wachsmuth and Till Werner
- 18:15–18:18 *Tree Representations in Transition System for RST Parsing*
Jinfen Li and Lu Xiao
- 18:18–18:21 *Incremental Neural Lexical Coherence Modeling*
Sungho Jeon and Michael Strube
- 18:21–18:24 *Statistical Parsing of Tree Wrapping Grammars*
Tatiana Bladier, Jakub Waszczuk and Laura Kallmeyer
- 18:24–18:27 *Out-of-Task Training for Dialog State Tracking Models*
Michael Heck, Christian Geishauser, Hsien-chin Lin, Nurul Lubis, Marco Moresi, Carel van Niekerk and Milica Gasic
- 18:00–18:30 Session POSTER25: Machine Learning and Language Modelling. Posters**
- 18:00–18:30 *Resource Constrained Dialog Policy Learning Via Differentiable Inductive Logic Programming*
Zhenpeng Zhou, Ahmad Beirami, Paul Crook, Pararth Shah, Rajen Subba and Alborz Geramifard
- 18:00–18:30 *German’s Next Language Model*
Branden Chan, Stefan Schweter and Timo Möller
- 18:00–18:30 *Language Model Transformers as Evaluators for Open-domain Dialogues*
Rostislav Nedelchev, Jens Lehmann and Ricardo Usbeck
- 18:00–18:30 *Embedding Dynamic Attributed Networks by Modeling the Evolution Processes*
Zenan Xu, Zijing Ou, Qinliang Su, Jianxing Yu, Xiaojun Quan and ZhenKun Lin
- 18:00–18:30 *Learning distributed sentence vectors with bi-directional 3D convolutions*
Bin Liu, Liang Wang and Guosheng Yin
- 18:00–18:30 *Don’t Invite BERT to Drink a Bottle: Modeling the Interpretation of Metonymies Using BERT and Distributional Representations*
Paolo Pedinotti and Alessandro Lenci

Friday, December 11, 2020 (continued)

- 18:00–18:30 *Neural Unsupervised Domain Adaptation in NLP—A Survey*
Alan Ramponi and Barbara Plank
- 18:00–18:30 *Exploring the Value of Personalized Word Embeddings*
Charles Welch, Jonathan K. Kummerfeld, Verónica Pérez-Rosas and Rada Mihalcea
- 18:00–18:30 *Do Neural Language Models Overcome Reporting Bias?*
Vered Shwartz and Yejin Choi
- 18:00–18:30 *Interpretable Multi-headed Attention for Abstractive Summarization at Controllable Lengths*
Ritesh Sarkhel, Moniba Keymanesh, Arnab Nandi and Srinivasan Parthasarathy
- 18:00–18:30 *Scale down Transformer by Grouping Features for a Lightweight Character-level Language Model*
Sungrae Park, Geewook Kim, JUNYEOP LEE, Junbum Cha, Ji-Hoon Kim and Hwalsuk Lee
- 18:00–18:30 *Attention Word Embedding*
Shashank Sonkar, Andrew Waters and Richard Baraniuk
- 18:00–18:30 *CharacterBERT: Reconciling ELMo and BERT for Word-Level Open-Vocabulary Representations From Characters*
Hicham El Boukkouri, Olivier Ferret, Thomas Lavergne, Hiroshi Noji, Pierre Zweigenbaum and Jun’ichi Tsujii
- 18:00–18:30 *Autoregressive Reasoning over Chains of Facts with Transformers*
Ruben Cartuyvels, Graham Spinks and Marie-Francine Moens
- 18:00–18:30 *Augmenting NLP models using Latent Feature Interpolations*
Amit Jindal, Arijit Ghosh Chowdhury, Aniket Didolkar, Di Jin, Ramit Sawhney and Rajiv Ratn Shah
- 18:00–18:30 *Neural Language Modeling for Named Entity Recognition*
Zhihong Lei, Weiyue Wang, Christian Dugast and Hermann Ney

Friday, December 11, 2020 (continued)

18:30–19:00 CLOSING