Diamond Level Sponsor

Diversity & Inclusion: Champion Sponsor

Bloomberg

Diversity & Inclusion: In-Kind Sponsor

Grammarly

Remote Presentation Sponsor

香港中文大學
The Chinese University of Hong Kong
Message from the General Chair

Welcome to the 1st Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 10th International Joint Conference on Natural Language Processing (AACL-IJCNL-2020) virtually hosted by Soochow University, China. I am honored to be the General Chair of the first conference of AACL and am excited to welcome you to the event.

Research in NLP in the Asia-Pacific region is rapidly growing. This is evident from the increasing number of paper submissions and participants in recent NLP conferences worldwide. Many innovative NLP theory and applications are presented in these events. To better share NLP innovations in the region, the Association for Computational Linguistics (ACL) established the Asia-Pacific Chapter of (AACL) in 2018. AACL provides a regional focus for ACL members in Asia-Pacific region to promote and to facilitate cooperation and information exchange among related scientific and professional societies and individuals in the region. This is the first bi-annual meeting of the Chapter and is jointly organized with the 10th International Joint Conference on Natural Language Processing (IJCNLP), which is the bi-annual conference of the Asia Federation of Natural Language Processing (AFNLP), a well-established association sharing the same missions as AACL. There is a saying “1+1 > 2” in China and this joint conference truly reflects that. AACL-IJCNLP-2020 is just a beginning, AACL will initiate more collaborations with AFNLP and other regional associations in the future so as to let the world appreciate more the work of the NLP communities in Asia-Pacific.

Soochow is a scenic and historic Chinese city. The city’s canals, stone bridges, pagodas and meticulously designed gardens have contributed to its status as one of the top tourist attractions in China. Noticeably, the Classical Gardens of Soochow were added to the list of the UNESCO World Heritage Sites in 1997 and 2000. Soochow is often dubbed the “Venice of the East” or “Venice of China”. These attractions would have added another flavor to the AACL-IJCNLP-2020 blending it a cultural and technical event. Several cultural tours and social events were originally planned. They would have been eye-opening to the participants. However, a face-to-face physical conference gave way to the COVID-19 pandemic. After a long period of observation since the beginning of the year, due to the growing severity of the pandemic worldwide, the local organizing committee recommended to organize AACL-IJCNL-2020 virtually in September. This was a difficult decision; but for safety reason, the team and I believed this was the right choice. Organization of a virtual conference was unconventional. It created a new set of challenging problems unfamiliar to the team. Fortunately, ACL2020 took place before AACL-IJCNL-2020 and we learned much from their experience.

The program co-chairs Kevin Knight and Hua Wu did an excellent job in putting together a very interesting program with 92 papers from submissions worldwide. The program also includes two star keynote speakers, Percy Liang, Stanford University, and Song-Chun Zhu, Peking University, Tsinghua University, and UCLA, to share with us their insights in “semantic parsing” and “explainable AI” respectively. These are hot topics both in pure and applied research. Selecting the papers from nearly 400 submissions was itself a difficult task but it was compounded by the complication in the design of the virtual program. Kevin and Hua had to take into account of the different time zones of the authors and audience and was rather tricky. Nevertheless, after many iterations, they came up with the current exciting program.

The conference is accompanied by 7 workshops and 6 tutorials. We participated in the joint selection processes with other ACL related conferences. The workshop co-chairs, Wei Gao and Lu Wang as well as the tutorial co-chairs Timothy Baldwin and Fei Xia did a wonderful job to select these very educational and trendy topics. In addition, despite the busy program schedule, with the dedication of the student workshop co-chairs, Lun-Wei Ku and Vincent Ng, we also put up a student research workshop; and with the dedication of the demo co-chairs, Douwe Kiela and Derek Wong, we accepted 7 system projects
out of 15 for demonstration. As a part of ACL’s Diversity and Inclusion (D&I) initiative, we introduced the Widening NLP (WiNLP) session in the first day of the conference. Xiangyu Duan and Tirthankar Ghosal, the D&I co-chairs, were very creative in organizing the session and other virtual D&I gathering events.

The publication co-chairs Steve DeNeefe and Satoshi Sekine worked diligently and carefully to collect the accepted papers for compilation of the electronic proceedings. Following the ACL guidelines, the papers are also included in the ACL Anthology. Since AACL-IJCNLP-2020 is a virtual conference, we decided not to compile a physical handbook. As such, information about the conference is made available online.

The local organization committee was chaired by Min Zhang. As usual, LOC is the committee which does all the ‘dirty’ jobs, ie hands-on work. Under Min’s leadership, LOC did a fantastic job in looking after all the details in local arrangement. Organizing a virtual conference was new to Min and the LOC. They put extra time and effort to ensure every single organization details were properly arranged. I also appreciated the frustration of the LOC at the beginning. They booked all the venues while the spreading of the COVID19 pandemic showed no sign of slowing down. We waited until September before we decided not to go for the face-to-face option, which left us with rather little time to prepare for the virtual conference. I am glad that we finally make it.

Working closely with the LOC, the remote presentation co-chairs, Nanyun Peng, Zhongqing Wang and Muyun Yang liaised with the program committee, demonstration committee, workshop committee, and tutorial committee to ensure presentations would be done smoothly. The webmaster, Junhui Li, was also part of the LOC, to ensure information related to the conference was timely distributed. Mirella Lapata, Haizhou Li and Qun Liu, the publicity co-chairs, made use of this conference information for international publicity through different channels, eg ACL, SIGIR, AAAI etc communities, and media. Eg. Instagram, Twitter, Facebook, Email, Wechat, etc.

Last but not the least, I would like to thank Priscilla Rasmussen, business manager of ACL HQ, for her invaluable advice throughout the AACL-IJCNLP-2020 project. She is definitely the most knowledgeable person in ACL event matters. And I am grateful to Haifeng Wang, President of ACL, and Chengqing Zong, President of AFNLP, for their trust. Undoubtedly, without their unfailing support, AACL-IJCNLP-2020 would not be possible. Also, thanks are due to Baidu and Huawei, the Diamond level sponsor, as well as Bloomberg and Grammarly for their generosity in supporting our D&I drive.

Enjoy AACL-IJCNLP-2020!

Kam-Fai Wong
General Chair
Hong Kong.
Greetings, and welcome to AACL-IJCNLP 2020, the First Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics (AACL) and the Tenth International Joint Conference on Natural Language Processing (IJCNLP)!

The Asia-Pacific Chapter of AACL is the newest chapter of AACL, and its first conference was held in 2020. The AACL-IJCNLP 2020 conference received 392 submissions to the main conference. We accepted 106 papers (73 long, 33 short), for an overall 28.3% acceptance rate. Submissions came from all over the world. Of the 106 accepted papers, 53 were from the Asia-Pacific region (28 from China, 10 from Japan, 7 from India, 3 from Taiwan, 2 from Australia, 2 from South Korea, and 1 from Indonesia), 31 from the Americas (27 from the USA, 3 from Canada, 1 from Brazil), and 22 from Europe and the Middle East (9 from the UK, 5 from Germany, 2 from France, 2 from Israel, 1 from the Netherlands, 1 from Italy, 1 from Denmark, and 1 from Belgium). 14 accepted papers were withdrawn by the authors, due to simultaneous submission to other conferences, resulting in a total of 92 papers presented at the main conference of AACL-IJCNLP 2020.

Like most conferences in 2020, AACL was a virtual one. Conference organizers opted for a real-time meeting, with papers grouped into topical sessions as done previously for in-person conferences. Authors further pre-recorded talks for convenient, off-schedule viewing.

We had two keynote addresses this year, one by Percy Liang of Stanford University, and one by Song-Chun Zhu of Peking University, Tsinghua University, and UCLA. Many thanks to Professors Liang and Zhu for exciting the AACL-IJCNLP participants with their sweeping talks!

For the main conference, 46 Area Chairs oversaw 392 submissions to 18 tracks. We would like to thank the Area Chairs and reviewers for their hard work. In addition, thanks to Rich Gerber of SoftConf for his always-timely help and Natalie Schluter for sharing the ACL 2020 paper-review matching tool with us. We would also like to thank the General, Local, and Publication Chairs for guidance and assistance in creating the main conference program. Finally, many thanks to the authors who carried out the research and submitted their work to AACL-IJCNLP 2020. We hope that the new AACL will continue to be a vibrant place to exchange research and ideas!

Kevin Knight, DiDi Labs
Hua Wu, Baidu
AACL-IJCNLP 2020 Program Committee Co-Chairs
Organizing Committee

General Chair:
Kam-Fai Wong, The Chinese University of Hong Kong, Hong Kong SAR, China

Program Committee Co-Chairs:
Kevin Knight, Didi Chuxing, USA
Hua Wu, Baidu, China

Organisation Chair:
Min Zhang, Soochow University, China

Workshop Co-Chairs:
Wei Gao, Singapore Management University, Singapore
Lu Wang, Northeastern University, USA

Student Workshop Co-Chair:
Lun-Wei Ku, IIS, Academic Sinica, Taiwan
Vincent Ng, University of Texas at Dallas, USA

Tutorial Co-Chairs:
Fei Xia, University of Washington, USA
Timothy Baldwin, University of Melbourne, Australia

Demo Co-Chairs:
Derek Wong, University of Macau, Macau SAR, China
Douwe Kiela, Facebook, USA

Publication Co-Chairs:
Satoshi Sekine, RIKEN, AIP, Japan
Steve DeNeefe, SDL, USA

Publicity Co-Chairs:
Qun Liu, Huawei Noak’s Ark Lab, Hong Kong SAR, China
Haizhou Li, National University of Singapore, Singapore
Sponsorship Co-ordinators:
Ming Zhou, Microsoft Research Asia, China
Yusuke Miyao, University of Tokyo, Japan

Diversity & Inclusion Co-Chairs:
Tirthankar Ghosal, Indian Institute of Technology Patna, India
Xiangyu Duan, Soochow University, China

Webmaster:
Junhui Li, Soochow University, China

AAACL CCC Representative:
Yang Liu, Tsinghua University, China

Remote Presentation Co-Chairs:
Zhongqing Wang, Soochow University, China
Muyun Yang, Harbin Institute of Technology, China
Nanyun Peng, Information Sciences Institute, USA
Program Committee

Program Committee Co-Chairs:
Kevin Knight, Didi Chuxing
Hua Wu, Baidu, China

Area Chairs:

Dialogue and Interactive Systems
Michel Galley, Minglie Huang

Discourse and Pragmatics
Sujian Li, Vincent Ng, Michael Strube

Information Retrieval and Document Analysis
Hitoshi Isahara, Yiqun Liu

Information Extraction and Text Mining
Dan Bikel, Hsin-Hsi Chen, Heng Ji

Knowledge Graphs
Sujith Ravi, Jie Tang

Linguistic Theories, Cognitive Modeling and Psycholinguistics
Mark Hopkins, William Schuler

Machine Learning for NLP
Kevin Duh, Wei Lu, Jun Suzuki

Machine Translation and Multilinguality
Marta R. Costa-jussà, Zhongjun He, Jonathan May, Taro Watanabe

NLP Applications
Jiwei Li, Lei Li

Phonology, Morphology and Word Segmentation
Daisuke Kawahara, Xipeng Qiu

Question Answering
Danqi Chen, Kang Liu, Scott Yih

Resources and Evaluation
Laura Rimell, Nianwen Xue

Semantics
Yaser Al-Onaizan, Kai-Wei Chang, He He, Michael Roth

Sentiment Analysis and Argument Mining
Jinho Choi, Yue Zhang

Social Media
Eiji Aramaki, Zhiyuan Liu, Alice Oh

Gorka Labaka, Matthieu Laboue, Ophélie Lacroix, Mathieu Lafourcade, Chiraag Lala, Divesh Lala, John P. Lalor, Albert Y.S. Lam, Wai Lam, Guy Lapalme, Ekaterina Lashkina-Koltunski, Stefan Larson, Jey Han Lau, Alberto Lavelli, Carolin Lawrence, Dawn Lawrie, Phong Le, Joseph Le Roux, Gianluca Lebani, Chong Min Lee, I-Ta Lee, John Lee, Joseph Lee, Lung-Hao Lee, Minwoo Lee, Moontae Lee, Roy Ka-Wei Lee, Young-Suk Lee, Gurpreet Lehal, Wenqiange Lei, Zeyang Lei, Jochen L. Leidner, Gaël Lejeune, Alessandro Lenci, Yves Lepage, Omer Levy, Martha Lewis, Baoli Li, Binyang Li, Bo Li, Bo Li, Changliang Li, Chen Li, Chenliang Li, Dingcheng Li, Fangtao Li, Haibo Li, Haizhou Li, Hang Li, Haoan Li, Hongzheng Li, Jiaqi Li, Jinchoo Li, Jing Li, Jinfeng Li, Jiwei Li, Juan Li, Juntao Li, Junyi Li, Junyi Jessy Li, Lei Li, Liangyou Li, Lishuang Li, Maolin Li, Peifeng Li, Peng Li, Peng-Hsuan Li, Piji Li, Quanzhi Li, Shaohua Li, Sheng Li, Shuangyin Li, Si Li, Sujian Li, Tao Li, Wei Li, Weikang Li, Wenjie Li, Xiang Li, Xiang Li, Xiaoli Li, Xin Li, Xintong Li, Xiujun Li, Yanyang Li, Yitong Li, Yuan-Fang Li, Yuncong Li, Zhi Li, Zhiyu Li, Zichao Li, Zuchao Li, Chao-Chun Liang, Paul Pu Liang, Hao Liao, Mark Liberman, Jindrich Libovicky, Mohamed Lichouri, Chaya Liebeskind, Gilbert Lim, Bill Yuchen Lin, Chia-Wen Lin, Chuan-Jie Lin, Lucy H. Lin, Shou-de Lin, Xi Victoria Lin, Ye Lin, Zhouhan Lin, Zi Lin, Yuan Ling, Zhenghua Ling, Aldo Lipani, Tom Lippincott, Pierre Lison, Bang Liu, Bing Liu, Chenxi Liu, Dexi Liu, Fei Liu, Fenglin Liu, Songshen Liu, Guiliang Liu, Han Liu, Haochen Liu, Jiangming Liu, Jing Liu, Kang Liu, Lemao Liu, Maofu Liu, Ming Liu, Ming Liu, Nelson F. Liu, Peng Liu, Qun Liu, Shuang Liu, Shujie Liu, Sijia Liu, Tianyi Liu, Tianyu Liu, Ting Liu, Tong Liu, Xianggen Liu, Xiaodong Liu, Xiaoyuan Liu, Xuanqing Liu, Yang Liu, Yijia Liu, Yiqun Liu, Yong Liu, Yongbin Liu, Zhenghao Liu, Zhimin Liu, Zhiyuan Liu, Zhiyuan Liu, Zhonghao Liu, Zhibin Liu, Zhiyu Liu, Zhiyu Liu, Zhuang Liu, Zitao Liu, Alexander Loser, Usha Lokala, Congjun Long, Jose Lopes, Marcos Lopes, Henrique Lopes Cardoso, Oier Lopez de Lacalle, Jaime Lorenzo-Trueba, J-Guang LOU, Natalia Loukachevitch, Daniel Loreur, Ismini Lourentzou, Kate Lovesey, Dawei Lu, Di Lu, Jianguo Lu, Jing Lu, Wei Lu, Weiming Lu, Yanbin Lu, Yichao Lu, Gale Lucas, Zhaozheng Luo, Liangchen Luo, Ling Luo, Weihua Luo, Wencan Luo, Zhunchen Luo, Chunchuan Luu, Yajuan Lyu

Jianqiang Ma, Jing Ma, Long-Long Ma, Wei-Yun Ma, Xuezhe Ma, Aman Madaan, Andrea Madotto, Manuel Mager, Diwakar Mahajan, Debanjan Mahata, Jean Maillard, Peter Makarov, Martin Makrai, Andreas Maletti, Igor Malioutov, Valentin Malych, Radhika
Tan, Ming Tan, Kumiko Tanaka-Ishii, Duyu Tang, Gongbo Tang, Jie Tang, Qingming Tang, Raphael Tang, Shuai Tang, Siliang Tang, Xiangyun Tang, Chongyang Tao, Fei Tao, Yifeng Tao, Yuka Tateisi, Marta Tatutoy, Yi Tay, Andon Tchechmedjiev, Christoph Teichmann, Selma Tekir, Irina Temnikova, Zhiyang Teng, Joel Tetreault, Uthayasanker Thayasivam, Krishnaprasad Thirunarayan, Jesse Thomsen, Brian Thompson, Camilo Thorne, Veronika Thost, Yuan Tian, Swati Tiwari, Erik Tjong Kim Sang, Takenobu Tokunaga, Gaurav Singh Tomar, Nadi Tomeh, Mariya Toneva, Kentaro Torisawa, Adrià Torrens Urtxutia, Samia Touilbe, Ke Tran, Quan Hung Tran, Tran Tran, Diana Trandabat, Alina Trifan, Jan Trmal, Chen-Tse Tsai, Adam Tsakalidis, Yuen-Hsien Tseng, Yulia Tsvetkov, Lifu Tu, Ming Tu, Zhaopeng Tu, Aaron Tuor, Gokhan Tur, Marco Turchi, Ferhan Ture, Rory Turnbull, Martin Tutek

Kiyotaka Uchimoto, Adrian Ulges, Lyle Ungar, Shyam Upadhyay, L. Alfonso Urena Lopez, Zdenka Uresova, Masao Utiyama, Takehito Utsuro


Aris Xanthos, Xuefeng Xi, Yikun Xian, Chunyang Xiao, Han Xiao, Huiru Xiao, MIN Xiao, Tong Xiao, Xinyan Xiao, Yanghua Xiao, Boyi Xie, Qizhe Xie, Ruobing Xie, Yingwei Xin, Frank Xing, Yujie Xing, Zhenchang Xing, Chao Xiong, Deyi Xiong, hao xiong, Hongyu Xiong, Bo Xu, Canwen Xu, Dongkuan Xu, Fan Xu, Guandong Xu, Hainan Xu, Hongzhi Xu, Hu Xu, Hua Xu, Jia Xu, jiaming xu, Jinan Xu, Kun Xu, Qiongkai Xu, Ruifeng Xu, Tong Xu, Weiran Xu, Wenduan Xu, Yang Xu, Nianwen Xue, Qinghan Xue

Shuntaro Yada, Yadollah Yaghoobzadeh, Ikuya Yamada, Takehiro Yamamoto, Ming Yan, Xiaohui Yan, Baosong Yang, Bishan Yang, Eugene Yang, Haiqin Yang, Jie Yang, Jie Yang, Jingxuan Yang, Liner Yang, Liu Yang, Longfei Yang, Min Yang, Qian Yang, Shaohua Yang,
Table of Contents

Touch Editing: A Flexible One-Time Interaction Approach for Translation
Qian Wang, Jiajun Zhang, Lemao Liu, Guoping Huang and Chengqing Zong .......................... 1

Can Monolingual Pretrained Models Help Cross-Lingual Classification?
Zewen Chi, Li Dong, Furu Wei, Xianling Mao and Heyan Huang .......................... 12

Rumor Detection on Twitter Using Multiloss Hierarchical BiLSTM with an Attenuation Factor
Yudianto Sujana, Jiawen Li and Hung-Yu Kao ............................................................. 18

Graph Attention Network with Memory Fusion for Aspect-level Sentiment Analysis
Li Yuan, Jin Dong, Liang-Chih Yu and Xuejie Zhang .................................................. 27

FERNet: Fine-grained Extraction and Reasoning Network for Emotion Recognition in Dialogues
Yingmei Guo, Zhiyong Wu and Mingxing Xu .............................................................. 37

SentiRec: Sentiment Diversity-aware Neural News Recommendation
Chuhan Wu, Fangzhao Wu, Tao Qi and Yongfeng Huang ........................................... 44

BCTH: A Novel Text Hashing Approach via Bayesian Clustering
Ying Wenjie, Yuquan Le and Hantao Xiong .............................................................. 54

Lightweight Text Classifier using Sinusoidal Positional Encoding
Byoung-Doo Oh and Yu-Seop Kim ................................................................. 63

Towards Non-task-specific Distillation of BERT via Sentence Representation Approximation
Bowen Wu, Huan Zhang, MengYuan Li, Zongsheng Wang, Qihang Feng, Junhong Huang and
Baoxun Wang ........................................................................................................ 70

A Simple and Effective Usage of Word Clusters for CBOW Model
Yukun Feng, Chenlong Hu, Hidetaka Kamigaito, Hiroya Takamura and Manabu Okumura .... 80

Investigating Learning Dynamics of BERT Fine-Tuning
Yaru Hao, Li Dong, Furu Wei and Ke Xu .............................................................. 87

Second-Order Neural Dependency Parsing with Message Passing and End-to-End Training
Xinyu Wang and Kewei Tu ...................................................................................... 93

High-order Refining for End-to-end Chinese Semantic Role Labeling
Hao Fei, Yafeng Ren and Donghong Ji ................................................................. 100

Exploiting WordNet Synset and Hypernym Representations for Answer Selection
Weikang Li and Yunfang Wu ................................................................................ 106

A Simple Text-based Relevant Location Prediction Method using Knowledge Base
Mei Sasaki, Shumpei Okura and Shingo Ono ........................................................ 116

Learning Goal-oriented Dialogue Policy with opposite Agent Awareness
Zheng Zhang, Lizi Liao, Xiaoyan Zhu, Tat-Seng Chua, Zitao Liu, Yan Huang and Minlie Huang
122

An Empirical Study of Tokenization Strategies for Various Korean NLP Tasks
Kyubyong Park, Joohong Lee, Seongbo Jiang and Dawoon Jung ............................. 133
BERT-Based Neural Collaborative Filtering and Fixed-Length Contiguous Tokens Explanation
Reinald Adrian Pugoy and Hung-Yu Kao .......................................................... 143

Transformer-based Approach for Predicting Chemical Compound Structures
Yutaro Omote, Kyoumoto Matsushita, Tomoya Iwakura, Akihiro Tamura and Takashi Ninomiya 154

Chinese Grammatical Correction Using BERT-based Pre-trained Model
Hongfei Wang, Michiki Kurosawa, Satoru Katsumata and Mamoru Komachi ................. 163

Neural Gibbs Sampling for Joint Event Argument Extraction
Xiaozhi Wang, Shengyu Jia, Xu Han, Zhiyuan Liu, Juanzi Li, Peng Li and Jie Zhou .............. 169

Named Entity Recognition in Multi-level Contexts
Yubo Chen, Chuhan Wu, Tao Qi, Zhigang Yuan and Yongfeng Huang .......................... 181

A General Framework for Adaptation of Neural Machine Translation to Simultaneous Translation
Yun Chen, Liangyou Li, Xin Jiang, Xiao Chen and Qun Liu .................................... 191

UnihanLM: Coarse-to-Fine Chinese-Japanese Language Model Pretraining with the Unihan Database
Canwen Xu, Tao Ge, Chenliang Li and Furu Wei ............................................. 201

Towards a Better Understanding of Label Smoothing in Neural Machine Translation
Yingbo Gao, Weiyoue Wang, Christian Herold, Zijian Yang and Hermann Ney .................. 212

Comparing Probabilistic, Distributional and Transformer-Based Models on Logical Metonymy Interpretation
Giulia Rambelli, Emmanuele Chersoni, Alessandro Lenci, Philippe Blache and Chu-Ren Huang 224

AMR Quality Rating with a Lightweight CNN
Juri Opitz ................................................................. 235

Generating Commonsense Explanation by Extracting Bridge Concepts from Reasoning Paths
Haozhe Ji, Pei Ke, Shaohan Huang, Furu Wei and Minlie Huang ............................... 248

Unsupervised KB-to-Text Generation with Auxiliary Triple Extraction using Dual Learning
Zihao Fu, Bei Shi, Lidong Bing and Wai Lam .................................................. 258

Modality-Transferable Emotion Embeddings for Low-Resource Multimodal Emotion Recognition
Wenliang Dai, Zihan Liu, Tiezheng Yu and Pascale Fung .................................... 269

All-in-One: A Deep Attentive Multi-task Learning Framework for Humour, Sarcasm, Offensive, Motivation, and Sentiment on Memes
Dushyant Singh Chauhan, Dhanush S R, Asif Ekbal and Pushpak Bhattacharyya ............. 281

Identifying Implicit Quotes for Unsupervised Extractive Summarization of Conversations
Ryuji Kano, Yasuhide Miura, Tomoki Taniguchi and Tomoko Ohkuma ........................ 291

Unsupervised Aspect-Level Sentiment Controllable Style Transfer
Mukuntha Narayanan Sundararaman, Zishan Ahmad, Asif Ekbal and Pushpak Bhattacharyya . 303

Energy-based Self-attentive Learning of Abstractive Communities for Spoken Language Understanding
Guokan Shang, Antoine Tixier, Michalis Vazirgiannis and Jean-Pierre Lorê ........................ 313
Intent Detection with WikiHow
Li Zhang, Qing Lyu and Chris Callison-Burch ................................................................. 328

A Systematic Characterization of Sampling Algorithms for Open-ended Language Generation
Moin Nadeem, Tianxing He, Kyunghyun Cho and James Glass .................................... 334

Chinese Content Scoring: Open-Access Datasets and Features on Different Segmentation Levels
Yuning Ding, Andrea Horbach and Torsten Zesch .......................................................... 347

Analysis of Hierarchical Multi-Content Text Classification Model on B-SHARP Dataset for Early Detection of Alzheimer’s Disease
Renxuan Albert Li, Ihab Hajjar, Felicia Goldstein and Jinho D. Choi .............................. 358

An Exploratory Study on Multilingual Quality Estimation
Shuo Sun, Marina Fomicheva, Frédéric Blain, Vishrav Chaudhary, Ahmed El-Kishky, Adithya Renduchintala, Francisco Guzmán and Lucia Specia ......................................................... 366

English-to-Chinese Transliteration with Phonetic Auxiliary Task
Yuan He and Shay B. Cohen ............................................................................................... 378

Predicting and Using Target Length in Neural Machine Translation
Zijian Yang, Yingbo Gao, Weiyue Wang and Hermann Ney .............................................. 389

Grounded PCFG Induction with Images
Lifeng Jin and William Schuler .......................................................................................... 396

Heads-up! Unsupervised Constituency Parsing via Self-Attention Heads
Bowen Li, Taeuk Kim, Reinald Kim Amplayo and Frank Keller ...................................... 409

Building Location Embeddings from Physical Trajectories and Textual Representations
Laura Biester, Carmen Banea and Rada Mihalcea ............................................................ 425

Self-Supervised Learning for Pairwise Data Refinement
Gustavo Hernandez Abrego, Bowen Liang, Wei Wang, Zarana Parekh, Yinfei Yang and Yunhsuan Sung .......................................................... 435

A Survey of the State of Explainable AI for Natural Language Processing
Marina Danilevsky, Kun Qian, Ranit Aharonov, Yannis Katsis, Ban Kawas and Prithviraj Sen . 447

Beyond Fine-tuning: Few-Sample Sentence Embedding Transfer
Siddhant Garg, Rohit Kumar Sharma and Yingyu Liang .................................................. 460

Multimodal Pretraining for Dense Video Captioning
Gabriel Huang, Bo Pang, Zhenhai Zhu, Clara Rivera and Radu Soricut ........................... 470

Systematic Generalization on gSCAN with Language Conditioned Embedding
Tong Gao, Qi Huang and Raymond Mooney .............................................................. 491

Are Scene Graphs Good Enough to Improve Image Captioning?
Victor Siemen Janusz Milewski, Marie-Francine Moens and Iacer Calixto ........................ 504

Systematically Exploring Redundancy Reduction in Summarizing Long Documents
Wen Xiao and Giuseppe Carenini .................................................................................... 516

A Cascade Approach to Neural Abstractive Summarization with Content Selection and Fusion
Logan Lebanoff, Franck Dernoncourt, Doo Soon Kim, Walter Chang and Fei Liu ............. 529
Mixed-Lingual Pre-training for Cross-lingual Summarization
Ruochen Xu, Chenguang Zhu, Yu Shi, Michael Zeng and Xuedong Huang .......................... 536

Point-of-Interest Oriented Question Answering with Joint Inference of Semantic Matching and Distance Correlation
Yifei Yuan, Jingbo Zhou and Wai Lam ................................................................. 542

Leveraging Structured Metadata for Improving Question Answering on the Web
Xinya Du, Ahmed Hassan Awadallah, Adam Fourney, Robert Sim, Paul Bennett and Claire Cardie 551

English Intermediate-Task Training Improves Zero-Shot Cross-Lingual Transfer Too
Jason Phang, Iacer Calixto, Phu Mon Htut, Yada Pruksachatkun, Haokun Liu, Clara Vania, Katharina Kann and Samuel R. Bowman .......................................................... 557

STIL - Simultaneous Slot Filling, Translation, Intent Classification, and Language Identification: Initial Results using mBART on MultiATIS++
Jack FitzGerald ..................................................................................................... 576

SimulMT to SimulST: Adapting Simultaneous Text Translation to End-to-End Simultaneous Speech Translation
Xutai Ma, Juan Pino and Philipp Koehn ................................................................. 582

Cue Me In: Content-Inducing Approaches to Interactive Story Generation
Faeze Brahman, Alexandru Petrusca and Snigdha Chaturvedi ................................. 588

Liputan6: A Large-scale Indonesian Dataset for Text Summarization
Fajri Koto, Jey Han Lau and Timothy Baldwin ....................................................... 598

Generating Sports News from Live Commentary: A Chinese Dataset for Sports Game Summarization
Kuan-Hao Huang, Chen Li and Kai-Wei Chang ...................................................... 609

Massively Multilingual Document Alignment with Cross-lingual Sentence-Mover’s Distance
Ahmed El-Kishky and Francisco Guzmán ............................................................... 616

Improving Context Modeling in Neural Topic Segmentation
Linzi Xing, Brad Hackinen, Giuseppe Carenini and Francesco Trebbi ..................... 626

Contextualized End-to-End Neural Entity Linking
Haotian Chen, Xi Li, Andrej Zukov Gregoric and Sahil Wadhwa ......................... 637

DAPPER: Learning Domain-Adapted Persona Representation Using Pretrained BERT and External Memory
Prashanth Vijayaraghavan, Eric Chu and Deb Roy .................................................. 643

Event Coreference Resolution with Non-Local Information
Jing Lu and Vincent Ng .......................................................................................... 653

Neural RST-based Evaluation of Discourse Coherence
Grigorii Guz, Peyman Bateni, Darius Muglich and Giuseppe Carenini ..................... 664

Asking Crowdworkers to Write Entailment Examples: The Best of Bad Options
Clara Vania, Ruijie Chen and Samuel R. Bowman .................................................. 672
MaP: A Matrix-based Prediction Approach to Improve Span Extraction in Machine Reading Comprehension
Huaishao Luo, Yu Shi, Ming Gong, Linjun Shou and Tianrui Li ........................................ 687

Answering Product-related Questions with Heterogeneous Information
Wenxuan Zhang, Qian Yu and Wai Lam ................................................................. 696

Two-Step Classification using Recasted Data for Low Resource Settings
Shagun Uppal, Vivek Gupta, Avinash Swaminathan, Haimin Zhang, Debanjan Mahata, Rakesh Gosangi, Rajiv Ratn Shah and Amanda Stent .......................................................... 706

Explaining Word Embeddings via Disentangled Representation
Keng-Te Liao, Cheng-Syuan Lee, Zhong-Yu Huang and Shou-de Lin ......................... 720

Multi-view Classification Model for Knowledge Graph Completion
Wenbin Jiang, Mengfei Guo, Yufeng Chen, Ying Li, Jinan Xu, Yajuan Lyu and Yong Zhu ..... 726

Knowledge-Enhanced Named Entity Disambiguation for Short Text
Zhifan Feng, Qi Wang, Wenbin Jiang, Yajuan Lyu and Yong Zhu .................................. 735

More Data, More Relations, More Context and More Openness: A Review and Outlook for Relation Extraction
Xu Han, Tianyu Gao, Yankai Lin, Hao Peng, Yaoliang Yang, Chaojun Xiao, Zhiyuan Liu, Peng Li, Jie Zhou and Maosong Sun .............................................................................. 745

Robustness and Reliability of Gender Bias Assessment in Word Embeddings: The Role of Base Pairs
Haiyang Zhang, Alison Sneyd and Mark Stevenson .......................................................... 759

ExpanRL: Hierarchical Reinforcement Learning for Course Concept Expansion in MOOCs
Jifan Yu, Chenyu Wang, Gan Luo, Lei Hou, Juanzi Li, Jie Tang, Minlie Huang and Zhiyuan Liu 770

Vocabulary Matters: A Simple yet Effective Approach to Paragraph-level Question Generation
Vishwajeet Kumar, Manish Joshi, Ganesh Ramakrishnan and Yuan-Fang Li .................... 781

From Hero to Zéro: A Benchmark of Low-Level Adversarial Attacks
Steffen Eger and Yannik Benz ................................................................................... 786

Point-of-Interest Type Inference from Social Media Text
Danae Sánchez Villegas, Daniel Preotiuc-Pietro and Nikolaos Aletras ............................. 804

Reconstructing Event Regions for Event Extraction via Graph Attention Networks
Pei Chen, Hang Yang, Kang Liu, Ruihong Huang, Yubo Chen, Taifeng Wang and Jun Zhao . 811

Recipe Instruction Semantics Corpus (RISec): Resolving Semantic Structure and Zero Anaphora in Recipes
Yiwei Jiang, Klim Zaporojets, Johannes Deleu, Thomas Demeester and Chris Develder .... 821

Stronger Baselines for Grammatical Error Correction Using a Pretrained Encoder-Decoder Model
Satoru Katsumata and Mamoru Komachi ................................................................. 827

Sina Mandarin Alphabetical Words: A Web-driven Code-mixing Lexical Resource
Rong Xiang, Mingyu Wan, Qi Su, Chu-Ren Huang and Qin Lu ................................... 833

IndoNLU: Benchmark and Resources for Evaluating Indonesian Natural Language Understanding
Bryan Wilie, Karissa Vincentio, Genta Indra Winata, Samuel Cahyawijaya, Xiaohong Li, Zhi Yuan Lim, Sidik Soleman, Rahmad Mahendra, Pascale Fung, Syafri Bahar and Ayu Purwarianti .... 843

xxiii
Happy Are Those Who Grade without Seeing: A Multi-Task Learning Approach to Grade Essays Using Gaze Behaviour
Sandeep Mathias, Rudra Murthy, Diptesh Kanojia, Abhijit Mishra and Pushpak Bhattacharyya 858

Multi-Source Attention for Unsupervised Domain Adaptation
Xia Cui and Danushka Bollegala ................................................................. 873

Compressing Pre-trained Language Models by Matrix Decomposition
Matan Ben Noach and Yoav Goldberg .......................................................... 884

You May Like This Hotel Because ...: Identifying Evidence for Explainable Recommendations
Shin Kanouchi, Masato Neishi, Yuta Hayashibe, Hiroki Ouchi and Naoaki Okazaki ........... 890

A Unified Framework for Multilingual and Code-Mixed Visual Question Answering
Deepak Gupta, Pabitra Lenka, Asif Ekbal and Pushpak Bhattacharyya .......................... 900

Toxic Language Detection in Social Media for Brazilian Portuguese: New Dataset and Multilingual Analysis
João Augusto Leite, Diego Silva, Kalina Bontcheva and Carolina Scarton ..................... 914

Measuring What Counts: The Case of Rumour Stance Classification
Carolina Scarton, Diego Silva and Kalina Bontcheva .......................................... 925
Conference Program

Saturday, Dec. 5 (all sessions are scheduled between 8:00 and 24:00 UTC +8)

8:45–9:00  Opening Remarks

9:00–10:00  Keynote

10:00–11:00  Session 1A: Machine Translation and Multilinguality I

10:00–10:20  Touch Editing: A Flexible One-Time Interaction Approach for Translation
Qian Wang, Jiajun Zhang, Lemao Liu, Guoping Huang and Chengqing Zong

10:20–10:35  Can Monolingual Pretrained Models Help Cross-Lingual Classification?
Zewen Chi, Li Dong, Furu Wei, Xianling Mao and Heyan Huang

10:00–11:00  Session 1B: Sentiment Analysis and Argument Mining I

10:00–10:20  Rumor Detection on Twitter Using Multiloss Hierarchical BiLSTM with an Attenuation Factor
Yudianto Sujana, Jiawen Li and Hung-Yu Kao

10:20–10:40  Graph Attention Network with Memory Fusion for Aspect-level Sentiment Analysis
Li Yuan, Jin Wang, Liang-Chih Yu and Xuejie Zhang

Yingmei Guo, Zhiyong Wu and Mingxing Xu
Saturday, Dec. 5 (all sessions are scheduled between 8:00 and 24:00 UTC +8) (continued)

10:00–11:00  Session 1C: Information Retrieval and Document Analysis I

10:00–10:20  *SentiRec: Sentiment Diversity-aware Neural News Recommendation*
Chuhan Wu, Fangzhao Wu, Tao Qi and Yongfeng Huang

10:20–10:40  *BCTH: A Novel Text Hashing Approach via Bayesian Clustering*
Ying Wenjie, Yuquan Le and Hantao Xiong

10:40–10:55  *Lightweight Text Classifier using Sinusoidal Positional Encoding*
Byoung-Doo Oh and Yu-Seop Kim

11:00–12:00  Session 2A: Machine Learning for NLP I

11:00–11:20  *Towards Non-task-specific Distillation of BERT via Sentence Representation Approximation*
Bowen Wu, Huan Zhang, MengYuan Li, Zongsheng Wang, Qihang Feng, Junhong Huang and Baoxun Wang

11:20–11:35  *A Simple and Effective Usage of Word Clusters for CBOW Model*
Yukun Feng, Chenlong Hu, Hidetaka Kamigaito, Hiroya Takamura and Manabu Okumura

11:35–11:50  *Investigating Learning Dynamics of BERT Fine-Tuning*
Yaru Hao, Li Dong, Furu Wei and Ke Xu
Saturday, Dec. 5 (all sessions are scheduled between 8:00 and 24:00 UTC +8) (continued)

11:00–12:00  Session 2B: Tagging, Chunking, Syntax, and Parsing I

11:00–11:15  Second-Order Neural Dependency Parsing with Message Passing and End-to-End Training
Xinyu Wang and Kewei Tu

11:15–11:30  High-order Refining for End-to-end Chinese Semantic Role Labeling
Hao Fei, Yafeng Ren and Donghong Ji

11:00–12:00  Session 2C: Knowledge Graph

11:00–11:20  Exploiting WordNet Synset and Hypernym Representations for Answer Selection
Weikang Li and Yunfang Wu

11:20–11:35  A Simple Text-based Relevant Location Prediction Method using Knowledge Base
Mei Sasaki, Shumpei Okura and Shingo Ono

12:00–14:00  Lunch Break

14:00–15:00  Session 3A: Dialogue and Interactive Systems I & Phonology, Morphology and Word Segmentation I

14:00–14:20  Learning Goal-oriented Dialogue Policy with opposite Agent Awareness
Zheng Zhang, Lizi Liao, Xiaoyan Zhu, Tat-Seng Chua, Zitao Liu, Yan Huang and Minlie Huang

14:20–14:40  An Empirical Study of Tokenization Strategies for Various Korean NLP Tasks
Kyubyoung Park, Joohong Lee, Seongbo Jang and Dawoon Jung
14:00–15:00  Session 3B: NLP Applications I

14:00–14:20  BERT-Based Neural Collaborative Filtering and Fixed-Length Contiguous Tokens Explanation
Reinald Adrian Pugoy and Hung-Yu Kao

14:20–14:40  Transformer-based Approach for Predicting Chemical Compound Structures
Yutarou Omote, Kyoumoto Matsushita, Tomoya Iwakura, Akihiro Tamura and Takashi Ninomiya

14:40–14:55  Chinese Grammatical Correction Using BERT-based Pre-trained Model
Hongfei Wang, Michiki Kurosawa, Satoru Katsumata and Mamoru Komachi

15:00–16:00  Session 4A: Information Extraction and Text Mining I

15:00–15:20  Neural Gibbs Sampling for Joint Event Argument Extraction
Xiaozhi Wang, Shengyu Jia, Xu Han, Zhiyuan Liu, Juanzi Li, Peng Li and Jie Zhou

15:20–15:40  Named Entity Recognition in Multi-level Contexts
Yubo Chen, Chuhan Wu, Tao Qi, Zhigang Yuan and Yongfeng Huang

15:00–16:00  Session 4B: Machine Translation and Multilinguality II

15:00–15:20  A General Framework for Adaptation of Neural Machine Translation to Simultaneous Translation
Yun Chen, Liangyou Li, Xin Jiang, Xiao Chen and Qun Liu

Canwen Xu, Tao Ge, Chenliang Li and Furu Wei

15:40–16:00  Towards a Better Understanding of Label Smoothing in Neural Machine Translation
Yingbo Gao, Weiyue Wang, Christian Herold, Zijian Yang and Hermann Ney
Saturday, Dec. 5 (all sessions are scheduled between 8:00 and 24:00 UTC +8) (continued)

**16:00–17:00 Session 5A: Semantics I & Resources and Evaluation I**

16:00–16:20 *Comparing Probabilistic, Distributional and Transformer-Based Models on Logical Metonymy Interpretation*  
Giulia Rambelli, Emmanuele Chersoni, Alessandro Lenci, Philippe Blache and Chu-Ren Huang

16:20–16:40 *AMR Quality Rating with a Lightweight CNN*  
Juri Opitz

**16:00–17:00 Session 5B: Summarization and Generation I**

16:00–16:20 *Generating Commonsense Explanation by Extracting Bridge Concepts from Reasoning Paths*  
Haozhe Ji, Pei Ke, Shaohan Huang, Furu Wei and Minlie Huang

16:20–16:40 *Unsupervised KB-to-Text Generation with Auxiliary Triple Extraction using Dual Learning*  
Zihao Fu, Bei Shi, Lidong Bing and Wai Lam

**17:00–18:00 Session 6A: Speech, Vision, Robotics, Multimodal Grounding I**

17:00–17:20 *Modality-Transferable Emotion Embeddings for Low-Resource Multimodal Emotion Recognition*  
Wenliang Dai, Zihan Liu, Tiezheng Yu and Pascale Fung

17:20–17:40 *All-in-One: A Deep Attentive Multi-task Learning Framework for Humour, Sarcasm, Offensive, Motivation, and Sentiment on Memes*  
Dushyant Singh Chauhan, Dhanush S R, Asif Ekbal and Pushpak Bhattacharyya
Saturday, Dec. 5 (all sessions are scheduled between 8:00 and 24:00 UTC +8) (continued)

17:00–18:00  **Session 6B: Summarization and Generation II**

17:00–17:20  *Identifying Implicit Quotes for Unsupervised Extractive Summarization of Conversations*

Ryuji Kano, Yasuhide Miura, Tomoki Taniguchi and Tomoko Ohkuma

17:20–17:40  *Unsupervised Aspect-Level Sentiment Controllable Style Transfer*

Mukuntha Narayanan Sundararaman, Zishan Ahmad, Asif Ekbal and Pushpak Bhattacharyya

18:00–20:00  **Dinner Break**

20:00–21:00  **Plenary Session: NLP Review 2020**

21:00–22:00  **Session 7A: Dialogue and Interactive Systems II**

21:00–21:20  *Energy-based Self-attentive Learning of Abstractive Communities for Spoken Language Understanding*

Guokan Shang, Antoine Tixier, Michalis Vazirgiannis and Jean-Pierre Lorré

21:20–21:35  *Intent Detection with WikiHow*

Li Zhang, Qing Lyu and Chris Callison-Burch

22:00–23:00  **Session 8A: NLP Applications II**

22:00–22:20  *A Systematic Characterization of Sampling Algorithms for Open-ended Language Generation*

Moin Nadeem, Tianxing He, Kyunghyun Cho and James Glass

22:20–22:40  *Chinese Content Scoring: Open-Access Datasets and Features on Different Segmentation Levels*

Yuning Ding, Andrea Horbach and Torsten Zesch

22:40–22:55  *Analysis of Hierarchical Multi-Content Text Classification Model on B-SHARP Dataset for Early Detection of Alzheimer’s Disease*

Renxuan Albert Li, Ihab Hajjar, Felicia Goldstein and Jinho D. Choi
22:00–23:00 Session 8B: Machine Translation and Multilinguality III

22:00–22:20 *An Exploratory Study on Multilingual Quality Estimation*
Shuo Sun, Marina Fomicheva, Frédéric Blain, Vishrav Chaudhary, Ahmed El-Kishky, Adithya Renduchintala, Francisco Guzmán and Lucia Specia

22:20–22:40 *English-to-Chinese Transliteration with Phonetic Auxiliary Task*
Yuan He and Shay B. Cohen

22:40–22:55 *Predicting and Using Target Length in Neural Machine Translation*
Zijian Yang, Yingbo Gao, Weiyue Wang and Hermann Ney

22:00–23:00 Session 8C: Tagging, Chunking, Syntax, and Parsing II & Social Media I

22:00–22:20 *Grounded PCFG Induction with Images*
Lifeng Jin and William Schuler

22:20–22:40 *Heads-up! Unsupervised Constituency Parsing via Self-Attention Heads*
Bowen Li, Taeuk Kim, Reinald Kim Amplayo and Frank Keller

22:40–23:00 *Building Location Embeddings from Physical Trajectories and Textual Representations*
Laura Biester, Carmen Banea and Rada Mihalcea
23:00–24:00  Session 9A: Machine Learning for NLP II

23:00–23:20  Self-Supervised Learning for Pairwise Data Refinement
Gustavo Hernandez Abrego, Bowen Liang, Wei Wang, Zarana Parekh, Yinfei Yang
and Yunhsuan Sung

23:20–23:40  A Survey of the State of Explainable AI for Natural Language Processing
Marina Danilevsky, Kun Qian, Ranit Aharonov, Yannis Katsis, Ban Kawas and
Prithviraj Sen

Siddhant Garg, Rohit Kumar Sharma and Yingyu Liang

23:00–24:00  Session 9B: Speech, Vision, Robotics, Multimodal Grounding II

23:00–23:20  Multimodal Pretraining for Dense Video Captioning
Gabriel Huang, Bo Pang, Zhenhai Zhu, Clara Rivera and Radu Soricut

23:20–23:40  Systematic Generalization on gSCAN with Language Conditioned Embedding
Tong Gao, Qi Huang and Raymond Mooney

23:40–24:00  Are Scene Graphs Good Enough to Improve Image Captioning?
Victor Siemen Janusz Milewski, Marie-Francine Moens and Iacer Calixto
Saturday, Dec. 5 (all sessions are scheduled between 8:00 and 24:00 UTC +8) (continued)

23:00–24:00  Session 9C: Summarization and Generation III

23:00–23:20  Systematically Exploring Redundancy Reduction in Summarizing Long Documents
  Wen Xiao and Giuseppe Carenini

23:20–23:35  A Cascade Approach to Neural Abstractive Summarization with Content Selection and Fusion
  Logan Lebanoff, Franck Dernoncourt, Doo Soon Kim, Walter Chang and Fei Liu

23:35–23:50  Mixed-Lingual Pre-training for Cross-lingual Summarization
  Ruochen Xu, Chenguang Zhu, Yu Shi, Michael Zeng and Xuedong Huang

23:00–24:00  Session 9D: Demo 1 (4 papers: 3 N.America, 1 Europe)

Sunday, Dec. 6 (all sessions are scheduled between 8:00 and 20:00 UTC +8)

8:00–9:00  Session 10A: Question Answering I

8:00–8:20  Point-of-Interest Oriented Question Answering with Joint Inference of Semantic Matching and Distance Correlation
  Yifei Yuan, Jingbo Zhou and Wai Lam

8:20–8:35  Leveraging Structured Metadata for Improving Question Answering on the Web
  Xinya Du, Ahmed Hassan Awadallah, Adam Fourney, Robert Sim, Paul Bennett and Claire Cardie
Sunday, Dec. 6 (all sessions are scheduled between 8:00 and 20:00 UTC +8) (continued)

8:00–9:00  
**Session 10B: Machine Translation and Multilinguality IV**

8:00–8:20  
*English Intermediate-Task Training Improves Zero-Shot Cross-Lingual Transfer Too*  
Jason Phang, Jacer Calixto, Phu Mon Htut, Yada Pruksachatkun, Haokun Liu, Clara Vania, Katharina Kann and Samuel R. Bowman

8:20–8:35  
*STIL - Simultaneous Slot Filling, Translation, Intent Classification, and Language Identification: Initial Results using mBART on MultiATIS++*  
Jack FitzGerald

8:35–8:50  
*SimulMT to SimulST: Adapting Simultaneous Text Translation to End-to-End Simultaneous Speech Translation*  
Xutai Ma, Juan Pino and Philipp Koehn

8:00–9:00  
**Session 10C: Summarization and Generation IV**

8:00–8:20  
*Cue Me In: Content-Inducing Approaches to Interactive Story Generation*  
Faeze Brahman, Alexandru Petrusca and Snigdha Chaturvedi

8:20–8:40  
*Liputan6: A Large-scale Indonesian Dataset for Text Summarization*  
Fajri Koto, Jey Han Lau and Timothy Baldwin

8:40–8:55  
*Generating Sports News from Live Commentary: A Chinese Dataset for Sports Game Summarization*  
Kuan-Hao Huang, Chen Li and Kai-Wei Chang
Sunday, Dec. 6 (all sessions are scheduled between 8:00 and 20:00 UTC +8) (continued)

8:00–9:00  Session 10D: Demo II (3 N.America, 1 Asia)

9:00–10:00  Session 11A: Information Retrieval and Document Analysis II

9:00–9:20  Massively Multilingual Document Alignment with Cross-lingual Sentence-Mover’s Distance
Ahmed El-Kishky and Francisco Guzmán

9:20–9:40  Improving Context Modeling in Neural Topic Segmentation
Linzi Xing, Brad Hackinen, Giuseppe Carenini and Francesco Trebbi

9:40–9:55  Contextualized End-to-End Neural Entity Linking
Haotian Chen, Xi Li, Andrej Zukov Gregoric and Sahil Wadhwa

9:00–10:00  Session 11B: Discourse and Pragmatics I

9:00–9:20  DAPPER: Learning Domain-Adapted Persona Representation Using Pretrained BERT and External Memory
Prashanth Vijayaraghavan, Eric Chu and Deb Roy

9:20–9:40  Event Coreference Resolution with Non-Local Information
Jing Lu and Vincent Ng

9:40–9:55  Neural RST-based Evaluation of Discourse Coherence
Grigori Guz, Peyman Bateni, Darius Muglich and Giuseppe Carenini
Sunday, Dec. 6 (all sessions are scheduled between 8:00 and 20:00 UTC +8) (continued)

9:00–10:00  Session 11C: Resources and Evaluation II

9:00–9:20  Asking Crowdworkers to Write Entailment Examples: The Best of Bad Options
Clara Vania, Ruijie Chen and Samuel R. Bowman

10:00–11:00  Session 12A: Question Answering II

10:00–10:20  MaP: A Matrix-based Prediction Approach to Improve Span Extraction in Machine Reading Comprehension
Huaishao Luo, Yu Shi, Ming Gong, Linjun Shou and Tianrui Li

10:20–10:40  Answering Product-related Questions with Heterogeneous Information
Wenxuan Zhang, Qian Yu and Wai Lam

11:00–12:00  Keynote

12:00–14:00  Lunch Break

14:00–15:00  Session 13A: Semantics II

14:00–14:20  Two-Step Classification using Recasted Data for Low Resource Settings
Shagun Uppal, Vivek Gupta, Avinash Swaminathan, Haimin Zhang, Debanjan Mahata, Rakesh Gosangi, Rajiv Ratn Shah and Amanda Stent

14:20–14:35  Explaining Word Embeddings via Disentangled Representation
Keng-Te Liao, Cheng-Syuan Lee, Zhong-Yu Huang and Shou-de Lin
14:00–15:00  Session 13B: Knowledge Graph II

14:00–14:20  *Multi-view Classification Model for Knowledge Graph Completion*
Wenbin Jiang, Mengfei Guo, Yufeng Chen, Ying Li, Jinan Xu, Yajuan Lyu and Yong Zhu

14:20–14:40  *Knowledge-Enhanced Named Entity Disambiguation for Short Text*
Zhifan Feng, Qi Wang, Wenbin Jiang, Yajuan Lyu and Yong Zhu

15:00–16:00  Session 14A: Information Extraction and Text Mining II

15:00–15:20  *More Data, More Relations, More Context and More Openness: A Review and Outlook for Relation Extraction*
Xu Han, Tianyu Gao, Yankai Lin, Hao Peng, Yaoliang Yang, Chaojun Xiao, Zhiyuan Liu, Peng Li, Jie Zhou and Maosong Sun

15:20–15:40  *Robustness and Reliability of Gender Bias Assessment in Word Embeddings: The Role of Base Pairs*
Haiyang Zhang, Alison Sneyd and Mark Stevenson

15:00–16:00  Session 14B: NLP Applications III

15:00–15:20  *ExpanRL: Hierarchical Reinforcement Learning for Course Concept Expansion in MOOCs*
Jifan Yu, Chenyu Wang, Gan Luo, Lei Hou, Juanzi Li, Jie Tang, Minlie Huang and Zhiyuan Liu

15:20–15:35  *Vocabulary Matters: A Simple yet Effective Approach to Paragraph-level Question Generation*
Vishwajeet Kumar, Manish Joshi, Ganesh Ramakrishnan and Yuan-Fang Li
Sunday, Dec. 6 (all sessions are scheduled between 8:00 and 20:00 UTC +8) (continued)

15:00–16:00 Session 14C: Social Media and Computational Social Science II

15:00–15:20 From Hero to Zéroe: A Benchmark of Low-Level Adversarial Attacks
Steffen Eger and Yannik Benz

15:20–15:35 Point-of-Interest Type Inference from Social Media Text
Danae Sánchez Villegas, Daniel Preotiuc-Pietro and Nikolaos Aletras

16:00–17:00 Session 15A: Information Extraction and Text Mining III

16:00–16:20 Reconstructing Event Regions for Event Extraction via Graph Attention Networks
Pei Chen, Hang Yang, Kang Liu, Ruohong Huang, Yubo Chen, Taifeng Wang and Jun Zhao

16:20–16:35 Recipe Instruction Semantics Corpus (RISeC): Resolving Semantic Structure and Zero Anaphora in Recipes
Yiwei Jiang, Klim Zaporojets, Johannes Deleu, Thomas Demeester and Chris Develder

16:00–17:00 Session 15B: NLP Applications IV

16:20–16:35 Stronger Baselines for Grammatical Error Correction Using a Pretrained Encoder-Decoder Model
Satoru Katsumata and Mamoru Komachi

17:00–18:00 Session 16A: Resources and Evaluation III

17:00–17:20 Sina Mandarin Alphabetical Words: A Web-driven Code-mixing Lexical Resource
Rong Xiang, Mingyu Wan, Qi Su, Chu-Ren Huang and Qin Lu

17:20–17:40 IndoNLU: Benchmark and Resources for Evaluating Indonesian Natural Language Understanding
Bryan Wilie, Karissa Vincentio, Genta Indra Winata, Samuel Cahyawijaya, Xiaohong Li, Zhi Yuan Lim, Sidik Soleman, Rahmad Mahendra, Pascale Fung, Syafri Bahar and Ayu Purwarianti

17:40–18:00 Happy Are Those Who Grade without Seeing: A Multi-Task Learning Approach to Grade Essays Using Gaze Behaviour
Sandeep Mathias, Rudra Murthy, Diptesh Kanojia, Abhijit Mishra and Pushpak Bhattacharyya
Sunday, Dec. 6 (all sessions are scheduled between 8:00 and 20:00 UTC +8) (continued)

17:00–18:00  Session 16B: Machine Learning for NLP III

17:00–17:20  Multi-Source Attention for Unsupervised Domain Adaptation
Xia Cui and Danushka Bollegala

17:20–17:35  Compressing Pre-trained Language Models by Matrix Decomposition
Matan Ben Noach and Yoav Goldberg

18:00–19:00  Session 17A: NLP Applications V & Question Answering III

18:00–18:20  You May Like This Hotel Because ...: Identifying Evidence for Explainable Recommendations
Shin Kanouchi, Masato Neishi, Yuta Hayashibe, Hiroki Ouchi and Naoaki Okazaki

Deepak Gupta, Pabitra Lenka, Asif Ekbal and Pushpak Bhattacharyya

18:00–19:00  Session 17B: Social Media and Computational Social Science III

18:00–18:20  Toxic Language Detection in Social Media for Brazilian Portuguese: New Dataset and Multilingual Analysis
João Augusto Leite, Diego Silva, Kalina Bontcheva and Carolina Scarton

18:20–18:35  Measuring What Counts: The Case of Rumour Stance Classification
Carolina Scarton, Diego Silva and Kalina Bontcheva

19:00–20:00  Closing (Best Paper, Future conf.)