EMNLP-IJCNLP 2019

2019 Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing

Proceedings of the Conference

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Preface by the General Chair

Welcome to EMNLP-IJCNLP 2019 in Hong Kong! I hope that this will be a successful conference in the 25-year tradition of EMNLP and IJCNLP, as well as an enjoyable and enriching experience for all. Continuing recent trends, this year has seen overwhelming interest from researchers from all over the world. We received a total of 2,914 submissions, which is a 37% increase over EMNLP 2018 (2,117 submissions).

The three Program Co-Chairs, Jing Jiang, Vincent Ng, and Xiaojun Wan, oversaw the entire submission process, a truly Herculean feat. I am deeply grateful for your support. Managing such a large number of submissions would not have been possible without the hard work of a whopping 152 Area Chairs headed by 18 Senior Area Chairs as well, each responsible for overseeing a broad area. Under them, the combined effort of over 1,700 reviewers, each carefully examining submissions through the lens of their expertise, resulted in 465 long and 218 short papers to be presented at the main conference. Your efforts have been indispensable for making this conference happen.

I would like to express special thanks to Priscilla Rasmussen, the ACL Business Manager, who has been indispensable through many years of not only EMNLP but many other key NLP conferences. All of this would not have been possible without you. My deepest gratitude to David Yarowsky, Jian Su, and Noah Smith, and many others from the SIGDAT and AFNLP boards for their invaluable guidance in navigating difficult issues surrounding the daunting task I was faced with.

The hard work of our hosts, the Local Organizing Committee Chair Kam-Fai Wong and members Samuel Tam, Emmanuele Chersoni, Churen Huang, Wenjie Li, Derek F. Wong, and Ruifeng Xu, have especially been vital in bringing together EMNLP-IJCNLP 2019.

As many as 17 workshops and a co-located conference, CoNLL, have been coordinated by the Workshop Chairs Vera Demberg and Naoaki Okazaki. EMNLP-IJNLP 2019 will also be hosting a full-day tutorial and six half-day tutorials organized by the Tutorial Chairs Timothy Baldwin and Marine Carpuat. The combined efforts of the Demonstration Chairs Ruihong Huang and Sebastian Padó have culminated in a total of 44 accepted demo papers (out of 110 submissions) in addition to the overwhelming main conference papers. I am deeply grateful for your endless labor that brought to fruition an exciting program I am proud to be a part of.

We sought to make EMNLP 2019 a venue that is as welcoming and inclusive as possible to all. In this effort, we worked on continuing and expanding the diversity and inclusion (D&I) efforts initiated in recent NLP conferences as well as the Widening NLP workshop. The D&I committee, co-chaired by Chi-Kiu (Jackie) Lo and Vivek Srikumar, joined their forces with the Childcare Policy and Grant Coordinators Olivia Kwong and Sujian Li to help remove any obstacles to participating in a key event in the NLP community. Student Volunteer Coordinator and Student Scholarship Chair Wenjie Li and Marzieh Saeidi coordinated providing scholarships to students and non-students wanting to join us, who otherwise might not have had the means to. The D&I committee focused on several initiatives involving mentoring, both for first-time conference attendees and otherwise, providing accommodations and improving accessibility for participants if necessary, and generally making the conference experience a broadly comfortable one. For those unable to travel, we hope that the efforts of our Remote Presentation Chair, Derek F. Wong, enabled you to still feel included in the conference. We hope that these efforts to make EMNLP inclusive and welcoming will help enrich the conference.

A warm thank you to Micha Elsner, the General Publication Chair, Publication Chairs Fei Liu and Pontus Stenetorp, and also to Serena Villata, the Conference Handbook Chair, Kai-Wei Chang, the Conference Handbook Advisor, Natalie Schluter, the Conference Handbook Proofreader, for their strong sense of duty resulting in excellent supporting materials, arguably the most important contribution to many! I

must also thank Publicity Chairs Sebastian Ruder and Wei Xu, and Website and Conference App Chairs Kevin Duh and Henning Wachsmuth for your excellent promotion. We owe our success to reaching all those that could be interested, which cultivated a strong interest within the NLP community.

Last but not least, I would like to express my deepest gratitude to our sponsors, whose generous support has been invaluable in building up EMNLP and IJCNLP to what it is now, and to our Local Sponsorship Chair, Dongyan Zhao, for his assistance. A special thank you to Google, Facebook, Apple, ASAPP, and Salesforce, our Diamond sponsors. Many thanks to our Platinum sponsors Huawei, Baidu, DeepMind, and Amazon. We are also profoundly grateful to our Gold level sponsors PolyAI, Naver, ByteDance, Megagon Labs, Zhuiyi Technology, Verisk Analytics, and Xiaomi, Silver level sponsors Duolingo, SAP, Babelscape, eBay, and Cisco, Bronze level sponsor Shannon.AI, and finally, our supporting organization MEHK. Thank you for your monumental support towards hosting another (hopefully!) successful year of EMNLP-IJCNLP.

Finally, I would like to once again welcome you to EMNLP-IJCNLP 2019! We hope that this will be an exciting and memorable experience for you, especially if you are joining us for the first time. The NLP community is as thriving as ever, and I am honored to have had a part in hosting one of the leading conferences in the area of Natural Language Processing.

EMNLP-IJCNLP 2019 General Chair

Kentaro Inui, Tohoku University, Japan

Preface by the Program Committee Co-Chairs

Welcome to EMNLP-IJCNLP 2019, the first joint EMNLP and IJCNLP conference! While this is the first time IJCNLP is held in Hong Kong, EMNLP left its footprints here in 2000 when it was still a tiny conference. There is nothing more exciting than seeing it return to Hong Kong after 19 years as one of the largest NLP conferences.

Owing to a significant increase in the number of submissions to recent NLP conferences, we, for the first time in the history of EMNLP and IJCNLP, attempted to reduce workload for reviewers by implementing a dual submission policy, where we disallowed authors to submit papers that are under review by a journal or another conference at the time of submission. Despite this policy, EMNLP-IJCNLP received 2914 submissions (excluding those withdrawn by the authors after initial submissions). This is an increase of over 30% compared with EMNLP 2018, making EMNLP-IJCNLP 2019 the largest NLP conference ever! Out of the 2914 submissions, 38 were desk-rejected for various reasons including formatting problems, length problems and violation of the dual submission policy. In spite of the record number of submissions, we managed to maintain a similar acceptance rate as past NLP conferences given the vast amount of space available to us at the AsiaWorld-Expo. In the end, we accepted 683 submissions. Some statistics of the accepted papers can be found below.

	Long	Short	Total
Reviewed	1,813	1,063	2,876
Accepted as talk	164 (9.0%)	48 (4.5%)	212 (7.3%)
Accepted as poster	301 (16.6%)	170 (16.0%)	471 (16.4%)
Accepted (total)	465 (25.6%)	218 (20.5%)	683 (23.7%)

In addition, EMNLP-IJCNLP 2019 will feature 11 papers accepted by the Transactions of the Association for Computational Linguistics (TACL), out of which 8 will be presented orally and 3 as posters.

Handling close to 3000 submissions was a daunting task, but we were fortunate that a large team of volunteers from our community offered to help. Unlike last year's EMNLP, where a submission was reviewed in one of eight mega-areas, we organized this year's submissions into 18 areas, hoping that smaller areas would make things more manageable for our program committee. While traditionally large areas such as Information Extraction, Machine Learning for NLP, and Machine Translation and Multilinguality continued to receive a large number of submissions, areas such as Dialog and Interactive Systems and Summarization and Generation have grown significantly owing to the recent surge of interest in automated response generation.

We adopted a program committee structure similar to that of ACL 2019. For each area, we invited one Senior Area Chair, who worked with a team of Area Chairs (ranging from 4 to 18 per area) and an army of reviewers (1721 in total across all areas). Having a large number of ACs (152 in total) allowed us to assign each of them a reasonable number of papers, which in turn enabled them to better focus on evaluating each paper. Each submission was assigned to three reviewers and one AC. We allowed both the reviewers and the ACs to bid for papers, but used a combination of their bids and the TPMS (Toronto Paper Matching System) scores to assign papers. Although this lengthened the paper assignment process, we believe it allowed us to better match the submissions with reviewers. We also adopted a review form similar to what was used in ACL 2019 as we heard generally good feedback about less structured review forms. While NAACL HLT 2019 and ACL 2019 eliminated author response, we decided that it would be beneficial to keep it even though it put time pressure on our already tight reviewing schedule and resulted in additional work for our program committee members.

This year we received some submissions that raised ethical concerns from the reviewers, and we found that no existing guidelines could be applied. We decided to err on the side of acceptance, encouraging authors of otherwise acceptance-worthy papers to more deeply explore these issues in final drafts, and

encouraging the community to carry out further work.

We are extremely grateful to all the Senior Area Chairs, especially those who had a large number of submissions in their areas. The Senior Area Chairs did a fantastic job in nominating Area Chairs, recruiting reviewers and making final recommendations. We would also like to thank all the Area Chairs and reviewers for their hard work in writing meta-reviews and reviews, as well as leading and participating in the discussions. Special thanks to those emergency reviewers who offered help with short notice. Without the dedication of our program committee members, we would not be able to put together this conference program.

Award papers are an integral part of every NLP conference. Based on recommendations made by the ACs and the reviewers, we identified five candidates for the Best Paper award and another five for the Best Resource Paper award. We would like to thank Tim Baldwin, Claire Cardie, Dan Gildea, Qun Liu, Ellen Riloff, and Luke Zettlemoyer for serving in the Best Paper award committee, and Katrin Erk, Graeme Hirst, Gina-Anne Levow, Percy Liang, and Nianwen Xue for serving in the Best Resource Paper award committee. The award winners will be announced at the closing ceremony.

We are excited to have the following three keynote speakers: Noam Slonim (IBM Haifa), on automated debating technologies; Meeyoung Cha (KAIST), on research challenges in computational social science; and Kyunghyun Cho (NYU), on neural sequence modeling. We would like to thank them for traveling to Hong Kong to give the keynote speeches.

There are also many other people who contributed tremendously to the conference program, and we are very grateful for their help:

- Kentaro Inui, the General Conference Chair, who is always there to offer his help and advice;
- All the members of the Conference Coordinating Committee, who provided valuable advice on various issues that came up during the review process;
- David Chang and Julia Hockenmaier, Program Chairs of EMNLP 2018, who shared very helpful tips from their past experience;
- Rich Gerber from SoftConf, who helped us set up the conference submission site and always responded to our queries promptly;
- Other recent *ACL chairs who offered their help when we contacted them despite their busy schedule;
- TACL editors-in-chief Mark Johnson, Lillian Lee and Brian Roark, as well as TACL editorial assistant Cindy Robinson, for coordinating the TACL presentations with us;
- Micha Elsner, Fei Liu and Pontus Stenetorp, the Publication Chairs, who worked hard to compile the conference proceedings and kindly accommodated many last minute requests from authors;
- Kevin Duh, Henning Wachsmuth, Wei Xu and Sebastian Ruder, the Website Chairs and Publicity Chairs, who helped us make numerous announcements in a timely manner;
- Serena Villata, Natalie Schluter and Kai-Wei Chang for preparing and proofreading the conference handbook;
- Members of the Local Organizing Committee for making the local arrangements;
- Derek Wong, the Remote Presentation Chair, for taking care of remote presentations;
- Priscilla Rasmussen, whom we directed many inquiries to.

Again, welcome to EMNLP-IJCNLP 2019! We hope you will have a memorable conference experience!

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Xiaojun Wan, Peking University, China

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Invited Speaker: Meeyoung Cha, KAIST
Current Challenges in Computational Social Science

Abstract: Artificial intelligence (AI) is reshaping business and science. Computational social science is an interdisciplinary field that solves complex societal problems by adopting AI-driven methods, processes, algorithms, and systems on data of various forms. This talk will review some of the latest advances in the research that focuses on fake news and legal liability. I will first discuss the structural, temporal, and linguistic traits of fake news propagation. One emerging challenge here is the increasing use of automated bots to generate and propagate false information. I will also discuss the current issues on the legal liability of AI and robots, particularly on how to regulate them (e.g., moral machine, punishment gap). This talk will suggest new opportunities to tackle these problems.

Bio: Meeyoung Cha is an associate professor at the School of Computing in KAIST. Dr. Cha's research interests are in analyzing complex network systems, including web and social media. Her research in the field of data science, artificial intelligence, and computational social science has gained more than 12,000 citations based on Google Scholar and has received the best paper awards at ACM IMC and ICWSM. Dr. Cha is currently in the editorial board member of PeerJ and ACM Transactions on Social Computing, and she has served as a program co-chair for ICWSM 2015. Dr. Cha has worked at Facebook's Data Science Team as a Visiting Professor in 2015−2016. Since 2019, she is jointly affiliated with the Institute for Basic Science (IBS) in Korea as a Chief Investigator.

Invited Speaker: Kyunghyun Cho, New York University
Curiosity-driven Journey into Neural Sequence Models

Abstract: In this talk, I take the audience on a tour of my earlier and recent experiences in building neural sequence models. I start from the earlier experience of using a recurrent net for sequence-to-sequence learning and talk about the attention mechanism. I discuss factors behind the success of these earlier approaches, and how these were embraced by the community even before they sota'd. I then move on to a more recent research direction in unconventional neural sequence models that automatically learn to decide on the order of generation.

Bio: Kyunghyun Cho is an associate professor of computer science and data science at New York University and a research scientist at Facebook AI Research. He was a postdoctoral fellow at University of Montreal until summer 2015 under the supervision of Prof. Yoshua Bengio, and received PhD and MSc degrees from Aalto University early 2014 under the supervision of Prof. Juha Karhunen, Dr. Tapani Raiko and Dr. Alexander Ilin. He tries his best to find a balance among machine learning, natural language processing, and life, but almost always fails to do so.

Invited Speaker: Noam Slonim, IBM Haifa Research Lab

Project Debater - How Persuasive can a Computer be?

Abstract: Project Debater is the first AI system that can meaningfully debate a human opponent. The system, an IBM Grand Challenge, is designed to build coherent, convincing speeches on its own, as well as provide rebuttals to the opponent's main arguments. In February 2019, Project Debater competed against Harish Natarajan, who holds the world record for most debate victories, in an event held in San Francisco that was broadcasted live world-wide. In this talk I will tell the story of Project Debater, from conception to a climatic final event, describe its underlying technology, and discuss how it can be leveraged for advancing decision making and critical thinking.

Bio: Noam Slonim is a Distinguished Engineer at IBM Research AI. He received his doctorate from the Interdisciplinary Center for Neural Computation at the Hebrew University and held a post-doc position at the Genomics Institute at Princeton University. During his PhD, Noam received the best paper award in UAI and ECIR, and the best presentation award at SIGIR. Noam joined the IBM Haifa Research Lab in 2007, and in 2011 he proposed to develop Project Debater. He has been serving as the Principal Investigator of the project since then. Noam published around 60 peer reviewed articles, focusing on the last few years on advancing the emerging field of Computational Argumentation. Finally, Noam used to have a secondary career as a TV script writer. Coincidentally, or not, in a sitcom he co-created back in 1998, the last episode was focused on competitive debates.

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Hyun-Je Song and Seong-Bae Park

Efficient Convolutional Neural Networks for Diacritic Restoration
Sawsan Alqahtani, Ajay Mishra and Mona Diab

Improving Generative Visual Dialog by Answering Diverse Questions
Vishvak Murahari, Prithvijit Chattopadhyay, Dhruv Batra, Devi Parikh and Abhishek Das

Cross-lingual Transfer Learning with Data Selection for Large-Scale Spoken Language Understanding
Quynh Do and Judith Gaspers

Multi-Head Attention with Diversity for Learning Grounded Multilingual Multimodal Representations
Po-Yao Huang, Xiaojun Chang and Alexander Hauptmann

Decoupled Box Proposal and Featurization with Ultrafine-Grained Semantic Labels Improve Image Captioning and Visual Question Answering
Soravit Changpinyo, Bo Pang, Piyush Sharma and Radu Soricut

REO-Relevance, Extraness, Omission: A Fine-grained Evaluation for Image Captioning
Ming Jiang, Junjie Hu, Qiuyuan Huang, Lei Zhang, Jana Diesner and Jianfeng Gao

WSLLN:Weakly Supervised Natural Language Localization Networks
Mingfei Gao, Larry Davis, Richard Socher and Caiming Xiong

Grounding learning of modifier dynamics: An application to color naming
Xudong Han, Philip Schulz and Trevor Cohn

Robust Navigation with Language Pretraining and Stochastic Sampling
Xiujun Li, Chunyuan Li, Qiaolin Xia, Yonatan Bisk, Asli Celikyilmaz, Jianfeng Gao, Noah A. Smith and Yejin Choi

Towards Making a Dependency Parser See
Michalina Strzyz, David Vilares and Carlos Gómez-Rodríguez

Unsupervised Labeled Parsing with Deep Inside-Outside Recursive Autoencoders
Andrew Drozdov, Patrick Verga, Yi-Pei Chen, Mohit Iyyer and Andrew McCallum

Dependency Parsing for Spoken Dialog Systems
Sam Davidson, Dian Yu and Zhou Yu

Span-based Hierarchical Semantic Parsing for Task-Oriented Dialog
Panupong Pasupat, Sonal Gupta, Karishma Mandyam, Rushin Shah, Mike Lewis and Luke Zettlemoyer

16:18–16:30 *Mini-Break*

16:30–18:00 *Session 4*

Session 4A: Neural Machine Translation

16:30–16:48 *Enhancing Context Modeling with a Query-Guided Capsule Network for Document-level Translation*
Zhengxin Yang, Jinchao Zhang, Fandong Meng, Shuhao Gu, Yang Feng and Jie Zhou

16:48–17:06 *Simple, Scalable Adaptation for Neural Machine Translation*
Ankur Bapna and Orhan Firat

17:06–17:24 *Controlling Text Complexity in Neural Machine Translation*
Sweta Agrawal and Marine Carpuat

17:24–17:42 *Investigating Multilingual NMT Representations at Scale*
Sneha Kudugunta, Ankur Bapna, Isaac Caswell and Orhan Firat

17:42–18:00 *Hierarchical Modeling of Global Context for Document-Level Neural Machine Translation*
Xin Tan, Longyin Zhang, Deyi Xiong and Guodong Zhou

Session 4B: Question Answering I

16:30–16:48 *Cross-Lingual Machine Reading Comprehension*
Yiming Cui, Wanxiang Che, Ting Liu, Bing Qin, Shijin Wang and Guoping Hu

16:48–17:06 *A Multi-Type Multi-Span Network for Reading Comprehension that Requires Discrete Reasoning*
Minghao Hu, Yuxing Peng, Zhen Huang and Dongsheng Li

17:06–17:24 *Neural Duplicate Question Detection without Labeled Training Data*
Andreas Rücklé, Nafise Sadat Moosavi and Iryna Gurevych

17:24–17:42 *Asking Clarification Questions in Knowledge-Based Question Answering*
Jingjing Xu, Yuechen Wang, Duyu Tang, Nan Duan, Pengcheng Yang, Qi Zeng, Ming Zhou and Xu SUN

17:42–18:00 *Multi-View Domain Adapted Sentence Embeddings for Low-Resource Unsupervised Duplicate Question Detection*
Nina Poerner and Hinrich Schütze

Session 4C: Social Media and Computational Social Science

16:30–16:48 *Multi-label Categorization of Accounts of Sexism using a Neural Framework*
Pulkit Parikh, Harika Abburi, Pinkesh Badjatiya, Radhika Krishnan, Niyati Chhaya, Manish Gupta and Vasudeva Varma

16:48–17:06 *The Trumpiest Trump? Identifying a Subject's Most Characteristic Tweets*
Charuta Pethe and Steve Skiena

17:06–17:24 *Finding Microaggressions in the Wild: A Case for Locating Elusive Phenomena in Social Media Posts*
Luke Breitfeller, Emily Ahn, David Jurgens and Yulia Tsvetkov

17:24–17:42 *Reinforced Product Metadata Selection for Helpfulness Assessment of Customer Reviews*
Miao Fan, Chao Feng, Mingming Sun and Ping Li

17:42–18:00 *Learning Invariant Representations of Social Media Users*
Nicholas Andrews and Marcus Bishop

Session 4D: Text Mining and NLP Applications II

16:30–16:48 *(Male, Bachelor) and (Female, Ph.D) have different connotations: Parallelly Annotated Stylistic Language Dataset with Multiple Personas*
Dongyeop Kang, Varun Gangal and Eduard Hovy

16:48–17:06 *Movie Plot Analysis via Turning Point Identification*
Pinelopi Papalampidi, Frank Keller and Mirella Lapata

17:06–17:24 *Latent Suicide Risk Detection on Microblog via Suicide-Oriented Word Embeddings and Layered Attention*
Lei Cao, Huijun Zhang, Ling Feng, Zihan Wei, Xin Wang, Ningyun Li and Xiaohao He

17:24–17:42 *Deep Ordinal Regression for Pledge Specificity Prediction*
Shivashankar Subramanian, Trevor Cohn and Timothy Baldwin

17:42–18:00 [TACL] *Enabling Robust Grammatical Error Correction in New Domains: Datasets, Metrics, and Analyses*
Courtney Napoles, Maria Nadejde and Joel Tetreault

Poster and Demo Session 4: Dialog and Interactive Systems, Speech, Vision, Robotics, Multimodal and Grounding

Data-Efficient Goal-Oriented Conversation with Dialogue Knowledge Transfer Networks
Igor Shalyminov, Sungjin Lee, Arash Eshghi and Oliver Lemon

Multi-Granularity Representations of Dialog
Shikib Mehri and Maxine Eskenazi

Are You for Real? Detecting Identity Fraud via Dialogue Interactions
Weikang Wang, Jiajun Zhang, Qian Li, Chengqing Zong and Zhifei Li

Hierarchy Response Learning for Neural Conversation Generation
Bo Zhang and Xiaoming Zhang

Knowledge Aware Conversation Generation with Explainable Reasoning over Augmented Graphs
zhibin liu, Zheng-Yu Niu, Hua Wu and Haifeng Wang

Adaptive Parameterization for Neural Dialogue Generation
Hengyi Cai, Hongshen Chen, Cheng Zhang, Yonghao Song, Xiaofang Zhao and Dawei Yin

Towards Knowledge-Based Recommender Dialog System
Qibin Chen, Junyang Lin, Yichang Zhang, Ming Ding, Yukuo Cen, Hongxia Yang and Jie Tang

Structuring Latent Spaces for Stylized Response Generation
Xiang Gao, Yizhe Zhang, Sungjin Lee, Michel Galley, Chris Brockett, Jianfeng Gao and Bill Dolan

Improving Open-Domain Dialogue Systems via Multi-Turn Incomplete Utterance Restoration
Zhufeng Pan, Kun Bai, Yan Wang, Lianqiang Zhou and Xiaojiang Liu

Unsupervised Context Rewriting for Open Domain Conversation
Kun Zhou, Kai Zhang, Yu Wu, Shujie Liu and Jingsong Yu

Dually Interactive Matching Network for Personalized Response Selection in Retrieval-Based Chatbots
Jia-Chen Gu, Zhen-Hua Ling, Xiaodan Zhu and Quan Liu

DyKgChat: Benchmarking Dialogue Generation Grounding on Dynamic Knowledge Graphs
Yi-Lin Tuan, Yun-Nung Chen and Hung-yi Lee

Retrieval-guided Dialogue Response Generation via a Matching-to-Generation Framework
Deng Cai, Yan Wang, Wei Bi, Zhaopeng Tu, Xiaojiang Liu and Shuming Shi

Scalable and Accurate Dialogue State Tracking via Hierarchical Sequence Generation
Liliang Ren, Jianmo Ni and Julian McAuley

Low-Resource Response Generation with Template Prior
Ze Yang, wei wu, Jian Yang, Can Xu and zhoujun li

A Discrete CVAE for Response Generation on Short-Text Conversation
Jun Gao, Wei Bi, Xiaojiang Liu, Junhui Li, Guodong Zhou and Shuming Shi

Who Is Speaking to Whom? Learning to Identify Utterance Addressee in Multi-Party Conversations
Ran Le, Wenpeng Hu, Mingyue Shang, Zhenjun You, Lidong Bing, Dongyan Zhao and Rui Yan

A Semi-Supervised Stable Variational Network for Promoting Replier-Consistency in Dialogue Generation
Jinxin Chang, Ruifang He, Longbiao Wang, Xiangyu Zhao, Ting Yang and Ruifang Wang

Modeling Personalization in Continuous Space for Response Generation via Augmented Wasserstein Autoencoders
Zhangming Chan, Juntao Li, Xiaopeng Yang, Xiuying Chen, Wenpeng Hu, Dongyan Zhao and Rui Yan

Variational Hierarchical User-based Conversation Model
JinYeong Bak and Alice Oh

Recommendation as a Communication Game: Self-Supervised Bot-Play for Goal-oriented Dialogue
Dongyeop Kang, Anusha Balakrishnan, Pararth Shah, Paul Crook, Y-Lan Boureau and Jason Weston

CoSQL: A Conversational Text-to-SQL Challenge Towards Cross-Domain Natural Language Interfaces to Databases
Tao Yu, Rui Zhang, Heyang Er, Suyi Li, Eric Xue, Bo Pang, Xi Victoria Lin, Yi Chern Tan, Tianze Shi, Zihan Li, Youxuan Jiang, Michihiro Yasunaga, Sungrok Shim, Tao Chen, Alexander Fabbri, Zifan Li, Luyao Chen, Yuwen Zhang, Shreya Dixit, Vincent Zhang, Caiming Xiong, Richard Socher, Walter Lasecki and Dragomir Radev

A Practical Dialogue-Act-Driven Conversation Model for Multi-Turn Response Selection
Harshit Kumar, Arvind Agarwal and Sachindra Joshi

How to Build User Simulators to Train RL-based Dialog Systems
Weiyan Shi, Kun Qian, Xuewei Wang and Zhou Yu

[TACL] *Graph Convolutional Network with Sequential Attention for Goal-Oriented Dialogue Systems*
Suman Banerjee and Mitesh M Khapra

Low-Rank HOCA: Efficient High-Order Cross-Modal Attention for Video Captioning
Tao Jin, Siyu Huang, Yingming Li and Zhongfei Zhang

Image Captioning with Very Scarce Supervised Data: Adversarial Semi-Supervised Learning Approach
Dong-Jin Kim, Jinsoo Choi, Tae-Hyun Oh and In So Kweon

Dual Attention Networks for Visual Reference Resolution in Visual Dialog
Gi-Cheon Kang, Jaeseo Lim and Byoung-Tak Zhang

Unsupervised Discovery of Multimodal Links in Multi-image, Multi-sentence Documents
Jack Hessel, Lillian Lee and David Mimno

UR-FUNNY: A Multimodal Language Dataset for Understanding Humor
Md Kamrul Hasan, Wasifur Rahman, AmirAli Bagher Zadeh, Jianyuan Zhong, Md Iftekhar Tanveer, Louis-Philippe Morency and Mohammed (Ehsan) Hoque

Partners in Crime: Multi-view Sequential Inference for Movie Understanding
Nikos Papasarantopoulos, Lea Frermann, Mirella Lapata and Shay B. Cohen

Guiding the Flowing of Semantics: Interpretable Video Captioning via POS Tag
Xinyu Xiao, Lingfeng Wang, Bin Fan, Shinming Xiang and Chunhong Pan

A Stack-Propagation Framework with Token-Level Intent Detection for Spoken Language Understanding
Libo Qin, Wanxiang Che, Yangming Li, Haoyang Wen and Ting Liu

Talk2Car: Taking Control of Your Self-Driving Car
Thierry Deruyttere, Simon Vandenhende, Dusan Grujicic, Luc Van Gool and Marie-Francine Moens

Fact-Checking Meets Fauxtography: Verifying Claims About Images
Dimitrina Zlatkova, Preslav Nakov and Ivan Koychev

Video Dialog via Progressive Inference and Cross-Transformer
Weike Jin, Zhou Zhao, Mao Gu, Jun Xiao, Furu Wei and Yueting Zhuang

Executing Instructions in Situated Collaborative Interactions
Alane Suhr, Claudia Yan, Jack Schluger, Stanley Yu, Hadi Khader, Marwa Mouallem, Iris Zhang and Yoav Artzi

Fusion of Detected Objects in Text for Visual Question Answering
Chris Alberti, Jeffrey Ling, Michael Collins and David Reitter

TIGEr: Text-to-Image Grounding for Image Caption Evaluation
Ming Jiang, Qiuyuan Huang, Lei Zhang, Xin Wang, Pengchuan Zhang, Zhe Gan, Jana Diesner and Jianfeng Gao

[DEMO] *Chameleon: A Language Model Adaptation Toolkit for Automatic Speech Recognition of Conversational Speech*
Yuanfeng Song, Di Jiang, Weiwei Zhao, Qian Xu, Raymond Chi-Wing Wong and Qiang Yang

[DEMO] *PyOpenDial: A Python-based Domain-Independent Toolkit for Developing Spoken Dialogue Systems with Probabilistic Rules*
Youngsoo Jang, Jongmin Lee, Jaeyoung Park, Kyeng-Hun Lee, Pierre Lison and Kee-Eung Kim

[DEMO] *PolyResponse: A Rank-based Approach to Task-Oriented Dialogue with Application in Restaurant Search and Booking*
Matthew Henderson, Ivan Vulić, Iñigo Casanueva, Paweł Budzianowski, Daniela Gerz, Sam Coope, Georgios Spithourakis, Tsung-Hsien Wen, Nikola Mrkšić and Pei-Hao Su

Tuesday, November 5, 2019 (continued)

[DEMO] *LIDA: Lightweight Interactive Dialogue Annotator*
Edward Collins, Nikolai Rozanov and Bingbing Zhang

[DEMO] *EGG: a toolkit for research on Emergence of lanGuage in Games*
Eugene Kharitonov, Rahma Chaabouni, Diane Bouchacourt and Marco Baroni

[DEMO] *Entity resolution for noisy ASR transcripts*
Arushi Raghuvanshi, Vijay Ramakrishnan, Varsha Embar, Lucien Carroll and Karthik Raghunathan

[DEMO] *Gunrock: A Social Bot for Complex and Engaging Long Conversations*
Dian Yu, Michelle Cohn, Yi Mang Yang, Chun Yen Chen, Weiming Wen, Jiaping Zhang, Mingyang Zhou, Kevin Jesse, Austin Chau, Antara Bhowmick, Shreenath Iyer, Giritheja Sreenivasulu, Sam Davidson, Ashwin Bhandare and Zhou Yu

[DEMO] *HARE: a Flexible Highlighting Annotator for Ranking and Exploration*
Denis Newman-Griffis and Eric Fosler-Lussier

Wednesday, November 6, 2019

09:00–10:00 *Keynote II: Meeyoung Cha*

10:00–10:30 *Coffee Break*

10:30–12:00 *Session 5*

Session 5A: Machine Learning III

10:30–10:48 *Universal Adversarial Triggers for Attacking and Analyzing NLP*
Eric Wallace, Shi Feng, Nikhil Kandpal, Matt Gardner and Sameer Singh

10:48–11:06 *To Annotate or Not? Predicting Performance Drop under Domain Shift*
Hady Elsahar and Matthias Gallé

11:06–11:24 *Adaptively Sparse Transformers*
Gonçalo M. Correia, Vlad Niculae and André F. T. Martins

11:24–11:42 *Show Your Work: Improved Reporting of Experimental Results*
Jesse Dodge, Suchin Gururangan, Dallas Card, Roy Schwartz and Noah A. Smith

11:42–12:00 *A Deep Factorization of Style and Structure in Fonts*
Akshay Srivatsan, Jonathan Barron, Dan Klein and Taylor Berg-Kirkpatrick

Session 5B: Lexical Semantics II

10:30–10:48 *Cross-lingual Semantic Specialization via Lexical Relation Induction*
Edoardo Maria Ponti, Ivan Vulić, Goran Glavaš, Roi Reichart and Anna Korhonen

10:48–11:06 *Modelling the interplay of metaphor and emotion through multitask learning*
Verna Dankers, Marek Rei, Martha Lewis and Ekaterina Shutova

11:06–11:24 *How well do NLI models capture verb veridicality?*
Alexis Ross and Ellie Pavlick

11:24–11:42 *Modeling Color Terminology Across Thousands of Languages*
Arya D. McCarthy, Winston Wu, Aaron Mueller, William Watson and David Yarowsky

11:42–12:00 *Negative Focus Detection via Contextual Attention Mechanism*
Longxiang Shen, Bowei Zou, Yu Hong, Guodong Zhou, Qiaoming Zhu and AiTi Aw

Session 5C: Discourse and Pragmatics

10:30–10:48 *A Unified Neural Coherence Model*
Han Cheol Moon, Tasnim Mohiuddin, Shafiq Joty and Chi Xu

10:48–11:06 *Topic-Guided Coherence Modeling for Sentence Ordering by Preserving Global and Local Information*
Byungkook Oh, Seungmin Seo, Cheolheon Shin, Eunju Jo and Kyong-Ho Lee

11:06–11:24 *Neural Generative Rhetorical Structure Parsing*
Amandla Mabona, Laura Rimell, Stephen Clark and Andreas Vlachos

11:24–11:42 *Weak Supervision for Learning Discourse Structure*
Sonia Badene, Kate Thompson, Jean-Pierre Lorré and Nicholas Asher

11:42–12:00 *Predicting Discourse Structure using Distant Supervision from Sentiment*
Patrick Huber and Giuseppe Carenini

Session 5D: Text Mining and NLP Applications III

10:30–10:48 *The Myth of Double-Blind Review Revisited: ACL vs. EMNLP*
Cornelia Caragea, Ana Uban and Liviu P. Dinu

10:48–11:06 *Uncover Sexual Harassment Patterns from Personal Stories by Joint Key Element Extraction and Categorization*
Yingchi Liu, Quanzhi Li, Marika Cifor, Xiaozhong Liu, Qiong Zhang and Luo Si

11:06–11:24 *Identifying Predictive Causal Factors from News Streams*
Ananth Balashankar, Sunandan Chakraborty, Samuel Fraiberger and Lakshminarayanan Subramanian

11:24–11:42 *Training Data Augmentation for Detecting Adverse Drug Reactions in User-Generated Content*
Sepideh Mesbah, Jie Yang, Robert-Jan Sips, Manuel Valle Torre, Christoph Lofi, Alessandro Bozzon and Geert-Jan Houben

11:42–12:00 *Deep Reinforcement Learning-based Text Anonymization against Private-Attribute Inference*
Ahmadreza Mosallanezhad, Ghazaleh Beigi and Huan Liu

Poster and Demo Session 5: Question Answering, Textual Inference and Other Areas of Semantics

Tree-structured Decoding for Solving Math Word Problems
Qianying Liu, Wenyv Guan, Sujian Li and Daisuke Kawahara

PullNet: Open Domain Question Answering with Iterative Retrieval on Knowledge Bases and Text
Haitian Sun, Tania Bedrax-Weiss and William Cohen

Cosmos QA: Machine Reading Comprehension with Contextual Commonsense Reasoning
Lifu Huang, Ronan Le Bras, Chandra Bhagavatula and Yejin Choi

Finding Generalizable Evidence by Learning to Convince Q&A Models
Ethan Perez, Siddharth Karamcheti, Rob Fergus, Jason Weston, Douwe Kiela and Kyunghyun Cho

Ranking and Sampling in Open-Domain Question Answering
Yanfu Xu, Zheng Lin, Yuanxin Liu, Rui Liu, Weiping Wang and Dan Meng

A Non-commutative Bilinear Model for Answering Path Queries in Knowledge Graphs
Katsuhiko Hayashi and Masashi Shimbo

Generating Questions for Knowledge Bases via Incorporating Diversified Contexts and Answer-Aware Loss
Cao Liu, Kang Liu, Shizhu He, Zaiqing Nie and Jun Zhao

Multi-Task Learning for Conversational Question Answering over a Large-Scale Knowledge Base
Tao Shen, Xiubo Geng, Tao QIN, Daya Guo, Duyu Tang, Nan Duan, Guodong Long and Daxin Jiang

BiPaR: A Bilingual Parallel Dataset for Multilingual and Cross-lingual Reading Comprehension on Novels
Yimin Jing, Deyi Xiong and Zhen Yan

Language Models as Knowledge Bases?
Fabio Petroni, Tim Rocktäschel, Sebastian Riedel, Patrick Lewis, Anton Bakhtin, Yuxiang Wu and Alexander Miller

NumNet: Machine Reading Comprehension with Numerical Reasoning
Qiu Ran, Yankai Lin, Peng Li, Jie Zhou and Zhiyuan Liu

Unicoder: A Universal Language Encoder by Pre-training with Multiple Cross-lingual Tasks
Haoyang Huang, Yaobo Liang, Nan Duan, Ming Gong, Linjun Shou, Daxin Jiang and Ming Zhou

Addressing Semantic Drift in Question Generation for Semi-Supervised Question Answering
Shiyue Zhang and Mohit Bansal

Adversarial Domain Adaptation for Machine Reading Comprehension
Huazheng Wang, Zhe Gan, Xiaodong Liu, Jingjing Liu, Jianfeng Gao and Hongning Wang

Incorporating External Knowledge into Machine Reading for Generative Question Answering
Bin Bi, Chen Wu, Ming Yan, Wei Wang, Jiangnan Xia and Chenliang Li

Answering questions by learning to rank - Learning to rank by answering questions
George Sebastian Pirtoaca, Traian Rebedea and Stefan Ruseti

Discourse-Aware Semantic Self-Attention for Narrative Reading Comprehension
Todor Mihaylov and Anette Frank

Revealing the Importance of Semantic Retrieval for Machine Reading at Scale
Yixin Nie, Songhe Wang and Mohit Bansal

PubMedQA: A Dataset for Biomedical Research Question Answering
Qiao Jin, Bhuwan Dhingra, Zhengping Liu, William Cohen and Xinghua Lu

Quick and (not so) Dirty: Unsupervised Selection of Justification Sentences for Multi-hop Question Answering
Vikas Yadav, Steven Bethard and Mihai Surdeanu

Answering Complex Open-domain Questions Through Iterative Query Generation
Peng Qi, Xiaowen Lin, Leo Mehr, Zijian Wang and Christopher D. Manning

NL2pSQL: Generating Pseudo-SQL Queries from Under-Specified Natural Language Questions
Fuxiang Chen, Seung-won Hwang, Jaegul Choo, Jung-Woo Ha and Sunghun Kim

Leveraging Frequent Query Substructures to Generate Formal Queries for Complex Question Answering
Jiwei Ding, Wei Hu, Qixin Xu and Yuzhong Qu

Incorporating Graph Attention Mechanism into Knowledge Graph Reasoning Based on Deep Reinforcement Learning
Heng Wang, Shuangyin Li, Rong Pan and Mingzhi Mao

Learning to Update Knowledge Graphs by Reading News
Jizhi Tang, Yansong Feng and Dongyan Zhao

DIVINE: A Generative Adversarial Imitation Learning Framework for Knowledge Graph Reasoning
Ruiping Li and Xiang Cheng

Original Semantics-Oriented Attention and Deep Fusion Network for Sentence Matching
Mingtong Liu, Yujie Zhang, Jinan Xu and Yufeng Chen

Representation Learning with Ordered Relation Paths for Knowledge Graph Completion
Yao Zhu, Hongzhi Liu, Zhonghai Wu, Yang Song and Tao Zhang

Collaborative Policy Learning for Open Knowledge Graph Reasoning
Cong Fu, Tong Chen, Meng Qu, Woojeong Jin and Xiang Ren

Modeling Event Background for If-Then Commonsense Reasoning Using Context-aware Variational Autoencoder
Li Du, Xiao Ding, Ting Liu and Zhongyang Li

Asynchronous Deep Interaction Network for Natural Language Inference
Di Liang, Fubao Zhang, Qi Zhang and Xuanjing Huang

Keep Calm and Switch On! Preserving Sentiment and Fluency in Semantic Text Exchange
Steven Y. Feng, Aaron W. Li and Jesse Hoey

Query-focused Scenario Construction
Su Wang, Greg Durrett and Katrin Erk

Semi-supervised Entity Alignment via Joint Knowledge Embedding Model and Cross-graph Model
Chengjiang Li, Yixin Cao, Lei Hou, Jiaxin Shi, Juanzi Li and Tat-Seng Chua

[DEMO] *EUSP: An Easy-to-Use Semantic Parsing PlatForm*
Bo An, Chen Bo, Xianpei Han and Le Sun

[DEMO] *ParaQG: A System for Generating Questions and Answers from Paragraphs*
vishwajeet kumar, Sivaanandh Muneeswaran, Ganesh Ramakrishnan and Yuan-Fang Li

[DEMO] *CFO: A Framework for Building Production NLP Systems*
Rishav Chakravarti, Cezar Pendus, Andrzej Sakrajda, Anthony Ferritto, Lin Pan, Michael Glass, Vittorio Castelli, J William Murdock, Radu Florian, Salim Roukos and Avi Sil

[DEMO] *ABSApp: A Portable Weakly-Supervised Aspect-Based Sentiment Extraction System*
Oren Pereg, Daniel Korat, Moshe Wasserblat, Jonathan Mamou and Ido Dagan

[DEMO] *Memory Grounded Conversational Reasoning*
Seungwhan Moon, Pararth Shah, Rajen Subba and Anuj Kumar

12:00–13:30 *Lunch*

13:30–15:00 *Session 6*

Session 6A: Tagging, Chunking, Syntax and Parsing

13:30–13:48 *Designing and Interpreting Probes with Control Tasks*
John Hewitt and Percy Liang

13:48–14:06 *Specializing Word Embeddings (for Parsing) by Information Bottleneck*
Xiang Lisa Li and Jason Eisner

14:06–14:24 *Deep Contextualized Word Embeddings in Transition-Based and Graph-Based Dependency Parsing - A Tale of Two Parsers Revisited*
Artur Kulmizev, Miryam de Lhoneux, Johannes Gontrum, Elena Fano and Joakim Nivre

14:24–14:42 *Semantic graph parsing with recurrent neural network DAG grammars*
Federico Fancellu, Sorcha Gilroy, Adam Lopez and Mirella Lapata

14:42–15:00 *75 Languages, 1 Model: Parsing Universal Dependencies Universally*
Dan Kondratyuk and Milan Straka

Session 6B: Question Answering II

13:30–13:48 *Interactive Language Learning by Question Answering*
Xingdi Yuan, Marc-Alexandre Côté, Jie Fu, Zhouhan Lin, Chris Pal, Yoshua Bengio and Adam Trischler

13:48–14:06 *What's Missing: A Knowledge Gap Guided Approach for Multi-hop Question Answering*
Tushar Khot, Ashish Sabharwal and Peter Clark

14:06–14:24 *KagNet: Knowledge-Aware Graph Networks for Commonsense Reasoning*
Bill Yuchen Lin, Xinyue Chen, Jamin Chen and Xiang Ren

14:24–14:42 *Learning with Limited Data for Multilingual Reading Comprehension*
Kyungjae Lee, Sunghyun Park, Hojae Han, Jinyoung Yeo, Seung-won Hwang and Juho Lee

14:42–15:00 *A Discrete Hard EM Approach for Weakly Supervised Question Answering*
Sewon Min, Danqi Chen, Hannaneh Hajishirzi and Luke Zettlemoyer

Session 6C: Linguistic Theories, Cognitive Modeling and Psycholinguistics

13:30–13:48 *Is the Red Square Big? MALeViC: Modeling Adjectives Leveraging Visual Contexts*
Sandro Pezzelle and Raquel Fernández

13:48–14:06 *Investigating BERT's Knowledge of Language: Five Analysis Methods with NPIs*
Alex Warstadt, Yu Cao, Ioana Grosu, Wei Peng, Hagen Blix, Yining Nie, Anna Alsop, Shikha Bordia, Haokun Liu, Alicia Parrish, Sheng-Fu Wang, Jason Phang, Anhad Mohananey, Phu Mon Htut, Paloma Jeretic and Samuel R. Bowman

14:06–14:24 *Representation of Constituents in Neural Language Models: Coordination Phrase as a Case Study*
Aixiu AN, Peng Qian, Ethan Wilcox and Roger Levy

14:24–14:42 *Towards Zero-shot Language Modeling*
Edoardo Maria Ponti, Ivan Vulić, Ryan Cotterell, Roi Reichart and Anna Korhonen

14:42–15:00 [TACL] *Neural Network Acceptability Judgments*
Alex Warstadt, Amanpreet Singh and Samuel R. Bowman

Session 6D: Sentiment Analysis and Argument Mining II

13:30–13:48 *What Gets Echoed? Understanding the "Pointers" in Explanations of Persuasive Arguments*
David Atkinson, Kumar Bhargav Srinivasan and Chenhao Tan

13:48–14:06 *Modeling Frames in Argumentation*
Yamen Ajjour, Milad Alshomary, Henning Wachsmuth and Benno Stein

14:06–14:24 *AMPERSAND: Argument Mining for PERSuAsive oNline Discussions*
Tuhin Chakrabarty, Christopher Hidey, Smaranda Muresan, Kathy McKeown and Alyssa Hwang

14:24–14:42 *Evaluating adversarial attacks against multiple fact verification systems*
James Thorne, Andreas Vlachos, Christos Christodoulopoulos and Arpit Mittal

14:42–15:00 *Nonsense!: Quality Control via Two-Step Reason Selection for Annotating Local Acceptability and Related Attributes in News Editorials*
Wonsuk Yang, seungwon yoon, Ada Carpenter and Jong Park

Poster and Demo Session 6: Discourse and Pragmatics, Summarization and Generation

Evaluating Pronominal Anaphora in Machine Translation: An Evaluation Measure and a Test Suite
Prathyusha Jwalapuram, Shafiq Joty, Irina Temnikova and Preslav Nakov

A Regularization Approach for Incorporating Event Knowledge and Coreference Relations into Neural Discourse Parsing
Zeyu Dai and Ruihong Huang

Weakly Supervised Multilingual Causality Extraction from Wikipedia
Chikara Hashimoto

Attribute-aware Sequence Network for Review Summarization
Junjie Li, Xuepeng Wang, Dawei Yin and Chengqing Zong

Extractive Summarization of Long Documents by Combining Global and Local Context
Wen Xiao and Giuseppe Carenini

Enhancing Neural Data-To-Text Generation Models with External Background Knowledge
Shuang Chen, Jinpeng Wang, Xiaocheng Feng, Feng Jiang, Bing Qin and Chin-Yew Lin

Reading Like HER: Human Reading Inspired Extractive Summarization
Ling Luo, Xiang Ao, Yan Song, Feiyang Pan, Min Yang and Qing He

Contrastive Attention Mechanism for Abstractive Sentence Summarization
Xiangyu Duan, Hongfei Yu, Mingming Yin, Min Zhang, Weihua Luo and Yue Zhang

NCLS: Neural Cross-Lingual Summarization
Junnan Zhu, Qian Wang, Yining Wang, Yu Zhou, Jiajun Zhang, Shaonan Wang and Chengqing Zong

Clickbait? Sensational Headline Generation with Auto-tuned Reinforcement Learning
Peng Xu, Chien-Sheng Wu, Andrea Madotto and Pascale Fung

Concept Pointer Network for Abstractive Summarization
Wenbo Wang, Yang Gao, Heyan Huang and Yuxiang Zhou

Surface Realisation Using Full Delexicalisation
Anastasia Shimorina and Claire Gardent

IMaT: Unsupervised Text Attribute Transfer via Iterative Matching and Translation
Zhijing Jin, Di Jin, Jonas Mueller, Nicholas Matthews and Enrico Santus

Better Rewards Yield Better Summaries: Learning to Summarise Without References
Florian Böhm, Yang Gao, Christian M. Meyer, Ori Shapira, Ido Dagan and Iryna Gurevych

Mixture Content Selection for Diverse Sequence Generation
Jaemin Cho, Minjoon Seo and Hannaneh Hajishirzi

An End-to-End Generative Architecture for Paraphrase Generation
Qian Yang, zhouyuan huo, Dinghan Shen, Yong Cheng, Wenlin Wang, Guoyin Wang and Lawrence Carin

Table-to-Text Generation with Effective Hierarchical Encoder on Three Dimensions (Row, Column and Time)
Heng Gong, Xiaocheng Feng, Bing Qin and Ting Liu

Subtopic-driven Multi-Document Summarization
Xin Zheng, Aixin Sun, Jing Li and Karthik Muthuswamy

Referring Expression Generation Using Entity Profiles
Meng Cao and Jackie Chi Kit Cheung

Exploring Diverse Expressions for Paraphrase Generation
Lihua Qian, Lin Qiu, Weinan Zhang, Xin Jiang and Yong Yu

Enhancing AMR-to-Text Generation with Dual Graph Representations
Leonardo F. R. Ribeiro, Claire Gardent and Iryna Gurevych

Keeping Consistency of Sentence Generation and Document Classification with Multi-Task Learning
Toru Nishino, Shotaro Misawa, Ryuji Kano, Tomoki Taniguchi, Yasuhide Miura and Tomoko Ohkuma

Toward a Task of Feedback Comment Generation for Writing Learning
Ryo Nagata

Improving Question Generation With to the Point Context
Jingjing Li, Yifan Gao, Lidong Bing, Irwin King and Michael R. Lyu

Deep Copycat Networks for Text-to-Text Generation
Julia Ive, Pranava Madhyastha and Lucia Specia

Towards Controllable and Personalized Review Generation
Pan Li and Alexander Tuzhilin

Answers Unite! Unsupervised Metrics for Reinforced Summarization Models
Thomas Scialom, Sylvain Lamprier, Benjamin Piwowarski and Jacopo Staiano

Long and Diverse Text Generation with Planning-based Hierarchical Variational Model
Zhihong Shao, Minlie Huang, Jiangtao Wen, Wenfei Xu and xiaoyan zhu

"Transforming" Delete, Retrieve, Generate Approach for Controlled Text Style Transfer
Akhilesh Sudhakar, Bhargav Upadhyay and Arjun Maheswaran

An Entity-Driven Framework for Abstractive Summarization
Eva Sharma, Luyang Huang, Zhe Hu and Lu Wang

Neural Extractive Text Summarization with Syntactic Compression
Jiacheng Xu and Greg Durrett

Domain Adaptive Text Style Transfer
Dianqi Li, Yizhe Zhang, Zhe Gan, Yu Cheng, Chris Brockett, Bill Dolan and Ming-Ting Sun

Let's Ask Again: Refine Network for Automatic Question Generation
Preksha Nema, Akash Kumar Mohankumar, Mitesh M. Khapra, Balaji Vasan Srinivasan and Balaraman Ravindran

Earlier Isn't Always Better: Sub-aspect Analysis on Corpus and System Biases in Summarization
Taehee Jung, Dongyeop Kang, Lucas Mentch and Eduard Hovy

[DEMO] *VizSeq: a visual analysis toolkit for text generation tasks*
Changhan Wang, Anirudh Jain, Danlu Chen and Jiatao Gu

[DEMO] *FAMULUS: Interactive Annotation and Feedback Generation for Teaching Diagnostic Reasoning*
Jonas Pfeiffer, Christian M. Meyer, Claudia Schulz, Jan Kiesewetter, Jan Zottmann, Michael Sailer, Elisabeth Bauer, Frank Fischer, Martin R. Fischer and Iryna Gurevych

[DEMO] *A Summarization System for Scientific Documents*
Shai Erera, Michal Shmueli-Scheuer, Guy Feigenblat, Ora Peled Nakash, Odellia Boni, Haggai Roitman, Doron Cohen, Bar Weiner, Yosi Mass, Or Rivlin, Guy Lev, Achiya Jerbi, Jonathan Herzig, Yufang Hou, Charles Jochim, Martin Gleize, Francesca Bonin, Francesca Bonin and David Konopnicki

[DEMO] *EASSE: Easier Automatic Sentence Simplification Evaluation*
Fernando Alva-Manchego, Louis Martin, Carolina Scarton and Lucia Specia

[DEMO] *ALTER: Auxiliary Text Rewriting Tool for Natural Language Generation*
Qiongkai Xu, Chenchen Xu and Lizhen Qu

15:00–15:30 *Coffee Break*

15:30–16:18 *Session 7*

Session 7A: Machine Translation and Multilinguality I

15:30–15:42 *Lost in Evaluation: Misleading Benchmarks for Bilingual Dictionary Induction*
Yova Kementchedjhieva, Mareike Hartmann and Anders Søgaard

15:42–15:54 *Towards Realistic Practices In Low-Resource Natural Language Processing: The Development Set*
Katharina Kann, Kyunghyun Cho and Samuel R. Bowman

15:54–16:06 *Synchronously Generating Two Languages with Interactive Decoding*
Yining Wang, Jiajun Zhang, Long Zhou, Yuchen Liu and Chengqing Zong

16:06–16:18 *On NMT Search Errors and Model Errors: Cat Got Your Tongue?*
Felix Stahlberg and Bill Byrne

Session 7B: Reasoning and Question Answering

15:30–15:42 *"Going on a vacation" takes longer than "Going for a walk": A Study of Temporal Commonsense Understanding*
Ben Zhou, Daniel Khashabi, Qiang Ning and Dan Roth

15:42–15:54 *QAInfomax: Learning Robust Question Answering System by Mutual Information Maximization*
Yi-Ting Yeh and Yun-Nung Chen

15:54–16:06 *Adapting Meta Knowledge Graph Information for Multi-Hop Reasoning over Few-Shot Relations*
Xin Lv, Yuxian Gu, Xu Han, Lei Hou, Juanzi Li and Zhiyuan Liu

16:06–16:18 *How Reasonable are Common-Sense Reasoning Tasks: A Case-Study on the Winograd Schema Challenge and SWAG*
Paul Trichelair, Ali Emami, Adam Trischler, Kaheer Suleman and Jackie Chi Kit Cheung

Session 7C: Generation I

15:30–15:42 *Pun-GAN: Generative Adversarial Network for Pun Generation*
Fuli Luo, Shunyao Li, Pengcheng Yang, Lei Li, Baobao Chang, Zhifang Sui and Xu SUN

15:42–15:54 *Multi-Task Learning with Language Modeling for Question Generation*
Wenjie Zhou, Minghua Zhang and Yunfang Wu

15:54–16:06 *Autoregressive Text Generation Beyond Feedback Loops*
Florian Schmidt, Stephan Mandt and Thomas Hofmann

16:06–16:18 *The Woman Worked as a Babysitter: On Biases in Language Generation*
Emily Sheng, Kai-Wei Chang, Premkumar Natarajan and Nanyun Peng

Session 7D: Sentiment Analysis and Argument Mining III

15:30–15:42 *On the Importance of Delexicalization for Fact Verification*
Sandeep Suntwal, Mithun Paul, Rebecca Sharp and Mihai Surdeanu

15:42–15:54 *Towards Debiasing Fact Verification Models*
Tal Schuster, Darsh Shah, Yun Jie Serene Yeo, Daniel Roberto Filizzola Ortiz, Enrico Santus and Regina Barzilay

15:54–16:06 *Recognizing Conflict Opinions in Aspect-level Sentiment Classification with Dual Attention Networks*
Xingwei Tan, Yi Cai and Changxi Zhu

16:06–16:18 *Investigating Dynamic Routing in Tree-Structured LSTM for Sentiment Analysis*
Jin Wang, Liang-Chih Yu, K. Robert Lai and Xuejie Zhang

Poster and Demo Session 7: Information Retrieval and Document Analysis, Lexical Semantics, Sentence-level Semantics, Machine Learning

A Label Informative Wide & Deep Classifier for Patents and Papers
Muyao Niu and Jie Cai

Text Level Graph Neural Network for Text Classification
Lianzhe Huang, Dehong Ma, Sujian Li, Xiaodong Zhang and Houfeng WANG

Semantic Relatedness Based Re-ranker for Text Spotting
Ahmed Sabir, Francesc Moreno and Lluís Padró

Delta-training: Simple Semi-Supervised Text Classification using Pretrained Word Embeddings
Hwiyeol Jo and Ceyda Cinarel

Visual Detection with Context for Document Layout Analysis
Carlos Soto and Shinjae Yoo

Evaluating Topic Quality with Posterior Variability
Linzi Xing, Michael J. Paul and Giuseppe Carenini

Neural Topic Model with Reinforcement Learning
Lin Gui, Jia Leng, Gabriele Pergola, yu zhou, Ruifeng Xu and Yulan He

Modelling Stopping Criteria for Search Results using Poisson Processes
Alison Sneyd and Mark Stevenson

Cross-Domain Modeling of Sentence-Level Evidence for Document Retrieval
Zeynep Akkalyoncu Yilmaz, Wei Yang, Haotian Zhang and Jimmy Lin

The Challenges of Optimizing Machine Translation for Low Resource Cross-Language Information Retrieval
Constantine Lignos, Daniel Cohen, Yen-Chieh Lien, Pratik Mehta, W. Bruce Croft and Scott Miller

Rotate King to get Queen: Word Relationships as Orthogonal Transformations in Embedding Space
Kawin Ethayarajh

GlossBERT: BERT for Word Sense Disambiguation with Gloss Knowledge
Luyao Huang, Chi Sun, Xipeng Qiu and Xuanjing Huang

Leveraging Adjective-Noun Phrasing Knowledge for Comparison Relation Prediction in Text-to-SQL
Haoyan Liu, Lei Fang, Qian Liu, Bei Chen, Jian-Guang LOU and Zhoujun Li

Bridging the Defined and the Defining: Exploiting Implicit Lexical Semantic Relations in Definition Modeling
Koki Washio, Satoshi Sekine and Tsuneaki Kato

Don't Just Scratch the Surface: Enhancing Word Representations for Korean with Hanja
Kang Min Yoo, Taeuk Kim and Sang-goo Lee

SyntagNet: Challenging Supervised Word Sense Disambiguation with Lexical-Semantic Combinations
Marco Maru, Federico Scozzafava, Federico Martelli and Roberto Navigli

Hierarchical Meta-Embeddings for Code-Switching Named Entity Recognition
Genta Indra Winata, Zhaojiang Lin, Jamin Shin, Zihan Liu and Pascale Fung

Fine-tune BERT with Sparse Self-Attention Mechanism
Baiyun Cui, Yingming Li, Ming Chen and Zhongfei Zhang

Feature-Dependent Confusion Matrices for Low-Resource NER Labeling with Noisy Labels
Lukas Lange, Michael A. Hedderich and Dietrich Klakow

A Multi-Pairwise Extension of Procrustes Analysis for Multilingual Word Translation
Hagai Taitelbaum, Gal Chechik and Jacob Goldberger

Out-of-Domain Detection for Low-Resource Text Classification Tasks
Ming Tan, Yang Yu, Haoyu Wang, Dakuo Wang, Saloni Potdar, Shiyu Chang and Mo Yu

Harnessing Pre-Trained Neural Networks with Rules for Formality Style Transfer
Yunli Wang, Yu Wu, Lili Mou, Zhoujun Li and Wenhan Chao

Multiple Text Style Transfer by using Word-level Conditional Generative Adversarial Network with Two-Phase Training
Chih-Te Lai, Yi-Te Hong, Hong-You Chen, Chi-Jen Lu and Shou-De Lin

Improved Differentiable Architecture Search for Language Modeling and Named Entity Recognition
Yufan Jiang, Chi Hu, Tong Xiao, Chunliang Zhang and Jingbo Zhu

Using Pairwise Occurrence Information to Improve Knowledge Graph Completion on Large-Scale Datasets
Esma Balkir, Masha Naslidnyk, Dave Palfrey and Arpit Mittal

Single Training Dimension Selection for Word Embedding with PCA
Yu Wang

A Surprisingly Effective Fix for Deep Latent Variable Modeling of Text
Bohan Li, Junxian He, Graham Neubig, Taylor Berg-Kirkpatrick and Yiming Yang

SciBERT: A Pretrained Language Model for Scientific Text
Iz Beltagy, Kyle Lo and Arman Cohan

Humor Detection: A Transformer Gets the Last Laugh
Orion Weller and Kevin Seppi

Combining Global Sparse Gradients with Local Gradients in Distributed Neural Network Training
Alham Fikri Aji, Kenneth Heafield and Nikolay Bogoychev

Small and Practical BERT Models for Sequence Labeling
Henry Tsai, Jason Riesa, Melvin Johnson, Naveen Arivazhagan, Xin Li and Amelia Archer

Data Augmentation with Atomic Templates for Spoken Language Understanding
Zijian Zhao, Su Zhu and Kai Yu

PaLM: A Hybrid Parser and Language Model
Hao Peng, Roy Schwartz and Noah A. Smith

A Pilot Study for Chinese SQL Semantic Parsing
Qingkai Min, Yuefeng Shi and Yue Zhang

Global Reasoning over Database Structures for Text-to-SQL Parsing
Ben Bogin, Matt Gardner and Jonathan Berant

Transductive Learning of Neural Language Models for Syntactic and Semantic Analysis
Hiroki Ouchi, Jun Suzuki and Kentaro Inui

Efficient Sentence Embedding using Discrete Cosine Transform
Nada Almarwani, Hanan Aldarmaki and Mona Diab

A Search-based Neural Model for Biomedical Nested and Overlapping Event Detection
Kurt Junshean Espinosa, Makoto Miwa and Sophia Ananiadou

PAWS-X: A Cross-lingual Adversarial Dataset for Paraphrase Identification
Yinfei Yang, Yuan Zhang, Chris Tar and Jason Baldridge

Pretrained Language Models for Sequential Sentence Classification
Arman Cohan, Iz Beltagy, Daniel King, Bhavana Dalvi and Dan Weld

Emergent Linguistic Phenomena in Multi-Agent Communication Games
Laura Harding Graesser, Kyunghyun Cho and Douwe Kiela

TalkDown: A Corpus for Condescension Detection in Context
Zijian Wang and Christopher Potts

Wednesday, November 6, 2019 (continued)

16:18–16:30 *Mini-Break*

16:30–18:00 *Session 8*

Session 8A: Summarization

16:30–16:48 *Summary Cloze: A New Task for Content Selection in Topic-Focused Summarization*
Daniel Deutsch and Dan Roth

16:48–17:06 *Text Summarization with Pretrained Encoders*
Yang Liu and Mirella Lapata

17:06–17:24 *How to Write Summaries with Patterns? Learning towards Abstractive Summarization through Prototype Editing*
Shen Gao, Xiuying Chen, Piji Li, Zhangming Chan, Dongyan Zhao and Rui Yan

17:24–17:42 *BottleSum: Unsupervised and Self-supervised Sentence Summarization using the Information Bottleneck Principle*
Peter West, Ari Holtzman, Jan Buys and Yejin Choi

17:42–18:00 *Improving Latent Alignment in Text Summarization by Generalizing the Pointer Generator*
Xiaoyu Shen, Yang Zhao, Hui Su and Dietrich Klakow

Session 8B: Sentence-level Semantics II

16:30–16:48 *Learning Semantic Parsers from Denotations with Latent Structured Alignments and Abstract Programs*
Bailin Wang, Ivan Titov and Mirella Lapata

16:48–17:06 *Broad-Coverage Semantic Parsing as Transduction*
Sheng Zhang, Xutai Ma, Kevin Duh and Benjamin Van Durme

17:06–17:24 *Core Semantic First: A Top-down Approach for AMR Parsing*
Deng Cai and Wai Lam

17:24–17:42 *Don't paraphrase, detect! Rapid and Effective Data Collection for Semantic Parsing*
Jonathan Herzig and Jonathan Berant

17:42–18:00 [TACL] *Massively Multilingual Sentence Embeddings for Zero-Shot Cross-Lingual Transfer and Beyond*
Mikel Artetxe and Holger Schwenk

Session 8C: Information Extraction II

16:30–16:48 *Improving Distantly-Supervised Relation Extraction with Joint Label Embedding*
Linmei Hu, Luhao Zhang, Chuan Shi, Liqiang Nie, Weili Guan and Cheng Yang

16:48–17:06 *Leverage Lexical Knowledge for Chinese Named Entity Recognition via Collaborative Graph Network*
Dianbo Sui, Yubo Chen, Kang Liu, Jun Zhao and Shengping Liu

17:06–17:24 *Looking Beyond Label Noise: Shifted Label Distribution Matters in Distantly Supervised Relation Extraction*
Qinyuan Ye, Liyuan Liu, Maosen Zhang and Xiang Ren

17:24–17:42 *Easy First Relation Extraction with Information Redundancy*
Shuai Ma, Gang Wang, Yansong Feng and Jinpeng Huai

17:42–18:00 *Dependency-Guided LSTM-CRF for Named Entity Recognition*
Zhanming Jie and Wei Lu

Session 8D: Information Retrieval and Document Analysis I

16:30–16:48 *Cross-Cultural Transfer Learning for Text Classification*
Dor Ringel, Gal Lavee, Ido Guy and Kira Radinsky

16:48–17:06 *Combining Unsupervised Pre-training and Annotator Rationales to Improve Low-shot Text Classification*
Oren Melamud, Mihaela Bornea and Ken Barker

17:06–17:24 *ProSeqo: Projection Sequence Networks for On-Device Text Classification*
Zornitsa Kozareva and Sujith Ravi

17:24–17:42 *Induction Networks for Few-Shot Text Classification*
Ruiying Geng, Binhua Li, Yongbin Li, Xiaodan Zhu, Ping Jian and Jian Sun

17:42–18:00 *Benchmarking Zero-shot Text Classification: Datasets, Evaluation and Entailment Approach*
Wenpeng Yin, Jamaal Hay and Dan Roth

Poster and Demo Session 8: Machine Learning

A Logic-Driven Framework for Consistency of Neural Models
Tao Li, Vivek Gupta, Maitrey Mehta and Vivek Srikumar

Style Transfer for Texts: Retrain, Report Errors, Compare with Rewrites
Alexey Tikhonov, Viacheslav Shibaev, Aleksander Nagaev, Aigul Nugmanova and Ivan P. Yamshchikov

Implicit Deep Latent Variable Models for Text Generation
Le Fang, Chunyuan Li, Jianfeng Gao, Wen Dong and Changyou Chen

Text Emotion Distribution Learning from Small Sample: A Meta-Learning Approach
Zhenjie Zhao and Xiaojuan Ma

Judge the Judges: A Large-Scale Evaluation Study of Neural Language Models for Online Review Generation
Cristina Garbacea, Samuel Carton, Shiyan Yan and Qiaozhu Mei

Sentence-BERT: Sentence Embeddings using Siamese BERT-Networks
Nils Reimers and Iryna Gurevych

Learning Only from Relevant Keywords and Unlabeled Documents
Nontawat Charoenphakdee, Jongyeong Lee, Yiping Jin, Dittaya Wanvarie and Masashi Sugiyama

Denoising based Sequence-to-Sequence Pre-training for Text Generation
Liang Wang, Wei Zhao, Ruoyu Jia, Sujian Li and Jingming Liu

Dialog Intent Induction with Deep Multi-View Clustering
Hugh Perkins and Yi Yang

Nearly-Unsupervised Hashcode Representations for Biomedical Relation Extraction
Sahil Garg, Aram Galstyan, Greg Ver Steeg and Guillermo Cecchi

Auditing Deep Learning processes through Kernel-based Explanatory Models
Danilo Croce, Daniele Rossini and Roberto Basili

Enhancing Variational Autoencoders with Mutual Information Neural Estimation for Text Generation
Dong Qian and William K. Cheung

Sampling Bias in Deep Active Classification: An Empirical Study
Ameya Prabhu, Charles Dognin and Maneesh Singh

Don't Take the Easy Way Out: Ensemble Based Methods for Avoiding Known Dataset Biases
Christopher Clark, Mark Yatskar and Luke Zettlemoyer

Achieving Verified Robustness to Symbol Substitutions via Interval Bound Propagation
Po-Sen Huang, Robert Stanforth, Johannes Welbl, Chris Dyer, Dani Yogatama, Sven Gowal, Krishnamurthy Dvijotham and Pushmeet Kohli

Rethinking Cooperative Rationalization: Introspective Extraction and Complement Control
Mo Yu, Shiyu Chang, Yang Zhang and Tommi Jaakkola

Experimenting with Power Divergences for Language Modeling
Matthieu Labeau and Shay B. Cohen

Hierarchically-Refined Label Attention Network for Sequence Labeling
Leyang Cui and Yue Zhang

Certified Robustness to Adversarial Word Substitutions
Robin Jia, Aditi Raghunathan, Kerem Göksel and Percy Liang

Visualizing and Understanding the Effectiveness of BERT
Yaru Hao, Li Dong, Furu Wei and Ke Xu

Topics to Avoid: Demoting Latent Confounds in Text Classification
Sachin Kumar, Shuly Wintner, Noah A. Smith and Yulia Tsvetkov

Learning to Ask for Conversational Machine Learning
Shashank Srivastava, Igor Labutov and Tom Mitchell

Language Modeling for Code-Switching: Evaluation, Integration of Monolingual Data, and Discriminative Training
Hila Gonen and Yoav Goldberg

Using Local Knowledge Graph Construction to Scale Seq2Seq Models to Multi-Document Inputs
Angela Fan, Claire Gardent, Chloé Braud and Antoine Bordes

Fine-grained Knowledge Fusion for Sequence Labeling Domain Adaptation
Huiyun Yang, Shujian Huang, XIN-YU DAI and Jiajun CHEN

Exploiting Monolingual Data at Scale for Neural Machine Translation
Lijun Wu, Yiren Wang, Yingce Xia, Tao QIN, Jianhuang Lai and Tie-Yan Liu

Meta Relational Learning for Few-Shot Link Prediction in Knowledge Graphs
Mingyang Chen, Wen Zhang, Wei Zhang, Qiang Chen and Huajun Chen

Distributionally Robust Language Modeling
Yonatan Oren, Shiori Sagawa, Tatsunori Hashimoto and Percy Liang

Unsupervised Domain Adaptation of Contextualized Embeddings for Sequence Labeling
Xiaochuang Han and Jacob Eisenstein

Learning Latent Parameters without Human Response Patterns: Item Response Theory with Artificial Crowds
John P. Lalor, Hao Wu and Hong Yu

Parallel Iterative Edit Models for Local Sequence Transduction
Abhijeet Awasthi, Sunita Sarawagi, Rasna Goyal, Sabyasachi Ghosh and Vihari Piratla

ARAML: A Stable Adversarial Training Framework for Text Generation
Pei Ke, Fei Huang, Minlie Huang and xiaoyan zhu

FlowSeq: Non-Autoregressive Conditional Sequence Generation with Generative Flow
Xuezhe Ma, Chunting Zhou, Xian Li, Graham Neubig and Eduard Hovy

Compositional Generalization for Primitive Substitutions
Yuanpeng Li, Liang Zhao, Jianyu Wang and Joel Hestness

WikiCREM: A Large Unsupervised Corpus for Coreference Resolution
Vid Kocijan, Oana-Maria Camburu, Ana-Maria Cretu, Yordan Yordanov, Phil Blunsom and Thomas Lukasiewicz

Identifying and Explaining Discriminative Attributes
Armins Stepanjans and André Freitas

Patient Knowledge Distillation for BERT Model Compression
Siqi Sun, Yu Cheng, Zhe Gan and Jingjing Liu

Neural Gaussian Copula for Variational Autoencoder
Prince Zizhuang Wang and William Yang Wang

Transformer Dissection: An Unified Understanding for Transformer's Attention via the Lens of Kernel
Yao-Hung Hubert Tsai, Shaojie Bai, Makoto Yamada, Louis-Philippe Morency and Ruslan Salakhutdinov

Learning to Learn and Predict: A Meta-Learning Approach for Multi-Label Classification
Jiawei Wu, Wenhan Xiong and William Yang Wang

Revealing the Dark Secrets of BERT
Olga Kovaleva, Alexey Romanov, Anna Rogers and Anna Rumshisky

Machine Translation With Weakly Paired Documents
Lijun Wu, Jinhua Zhu, Di He, Fei Gao, Tao QIN, Jianhuang Lai and Tie-Yan Liu

Countering Language Drift via Visual Grounding
Jason Lee, Kyunghyun Cho and Douwe Kiela

The Bottom-up Evolution of Representations in the Transformer: A Study with Machine Translation and Language Modeling Objectives
Elena Voita, Rico Sennrich and Ivan Titov

[DEMO] *NeuronBlocks: Building Your NLP DNN Models Like Playing Lego*
Ming Gong, Linjun Shou, Wutao Lin, Zhijie Sang, Quanjia Yan, Ze Yang, Feixiang Cheng and Daxin Jiang

Wednesday, November 6, 2019 (continued)

[DEMO] *Controlling Sequence-to-Sequence Models - A Demonstration on Neural-based Acrostic Generator*
Liang-Hsin Shen, Pei-Lun Tai, Chao-Chung Wu and Shou-De Lin

[DEMO] *AllenNLP Interpret: A Framework for Explaining Predictions of NLP Models*
Eric Wallace, Jens Tuyls, Junlin Wang, Sanjay Subramanian, Matt Gardner and Sameer Singh

[DEMO] *UER: An Open-Source Toolkit for Pre-training Models*
Zhe Zhao, Hui Chen, Jinbin Zhang, Xin Zhao, Tao Liu, Wei Lu, Xi Chen, Haotang Deng, Qi Ju and Xiaoyong Du

[DEMO] *MedCATTrainer: A Biomedical Free Text Annotation Interface with Active Learning and Research Use Case Specific Customisation*
Thomas Searle, Zeljko Kraljevic, Rebecca Bendayan, Daniel Bean and Richard Dobson

Thursday, November 7, 2019

09:00–10:00 *Keynote III: Kyunghyun Cho*

10:00–10:30 *Coffee Break*

10:30–12:00 *Session 9*

Session 9A: Machine Translation and Multilinguality II

10:30–10:48 *Do We Really Need Fully Unsupervised Cross-Lingual Embeddings?*
Ivan Vulić, Goran Glavaš, Roi Reichart and Anna Korhonen

10:48–11:06 *Weakly-Supervised Concept-based Adversarial Learning for Cross-lingual Word Embeddings*
Haozhou Wang, James Henderson and Paola Merlo

11:06–11:24 *Aligning Cross-Lingual Entities with Multi-Aspect Information*
Hsiu-Wei Yang, Yanyan Zou, Peng Shi, Wei Lu, Jimmy Lin and Xu SUN

11:24–11:42 *Contrastive Language Adaptation for Cross-Lingual Stance Detection*
Mitra Mohtarami, James Glass and Preslav Nakov

11:42–12:00 *Jointly Learning to Align and Translate with Transformer Models*
Sarthak Garg, Stephan Peitz, Udhyakumar Nallasamy and Matthias Paulik

Session 9B: Reasoning

10:30–10:48 *Social IQa: Commonsense Reasoning about Social Interactions*
Maarten Sap, Hannah Rashkin, Derek Chen, Ronan Le Bras and Yejin Choi

10:48–11:06 *Self-Assembling Modular Networks for Interpretable Multi-Hop Reasoning*
Yichen Jiang and Mohit Bansal

11:06–11:24 *Posing Fair Generalization Tasks for Natural Language Inference*
Atticus Geiger, Ignacio Cases, Lauri Karttunen and Christopher Potts

11:24–11:42 *Everything Happens for a Reason: Discovering the Purpose of Actions in Procedural Text*
Bhavana Dalvi, Niket Tandon, Antoine Bosselut, Wen-tau Yih and Peter Clark

11:42–12:00 *CLUTRR: A Diagnostic Benchmark for Inductive Reasoning from Text*
Koustuv Sinha, Shagun Sodhani, Jin Dong, Joelle Pineau and William L. Hamilton

Session 9C: Dialog and Interactive Systems II

10:30–10:48 *Taskmaster-1: Toward a Realistic and Diverse Dialog Dataset*
Bill Byrne, Karthik Krishnamoorthi, Chinnadhurai Sankar, Arvind Neelakantan, Ben Goodrich, Daniel Duckworth, Semih Yavuz, Amit Dubey, Kyu-Young Kim and Andy Cedilnik

10:48–11:06 *Multi-Domain Goal-Oriented Dialogues (MultiDoGO): Strategies toward Curating and Annotating Large Scale Dialogue Data*
Denis Peskov, Nancy Clarke, Jason Krone, Brigi Fodor, Yi Zhang, Adel Youssef and Mona Diab

11:06–11:24 *Build it Break it Fix it for Dialogue Safety: Robustness from Adversarial Human Attack*
Emily Dinan, Samuel Humeau, Bharath Chintagunta and Jason Weston

11:24–11:42 *GECOR: An End-to-End Generative Ellipsis and Co-reference Resolution Model for Task-Oriented Dialogue*
Jun Quan, Deyi Xiong, Bonnie Webber and Changjian Hu

11:42–12:00 *Task-Oriented Conversation Generation Using Heterogeneous Memory Networks*
Zehao Lin, Xinjing Huang, Feng Ji, Haiqing Chen and Yin Zhang

Session 9D: Sentiment Analysis and Argument Mining IV

10:30–10:48 *Aspect-based Sentiment Classification with Aspect-specific Graph Convolutional Networks*
Chen Zhang, Qiuchi Li and Dawei Song

10:48–11:06 *Coupling Global and Local Context for Unsupervised Aspect Extraction*
Ming Liao, Jing Li, Haisong Zhang, Lingzhi Wang, Xixin Wu and Kam-Fai Wong

11:06–11:24 *Transferable End-to-End Aspect-based Sentiment Analysis with Selective Adversarial Learning*
Zheng Li, Xin Li, Ying Wei, Lidong Bing, Yu Zhang and Qiang Yang

11:24–11:42 *CAN: Constrained Attention Networks for Multi-Aspect Sentiment Analysis*
Mengting Hu, Shiwan Zhao, Li Zhang, Keke Cai, Zhong Su, Renhong Cheng and Xiaowei Shen

11:42–12:00 *Leveraging Just a Few Keywords for Fine-Grained Aspect Detection Through Weakly Supervised Co-Training*
Giannis Karamanolakis, Daniel Hsu and Luis Gravano

Poster and Demo Session 9: Social Media and Computational Social Science, Text Mining and NLP Applications

Integrating Text and Image: Determining Multimodal Document Intent in Instagram Posts
Julia Kruk, Jonah Lubin, Karan Sikka, Xiao Lin, Dan Jurafsky and Ajay Divakaran

Neural Conversation Recommendation with Online Interaction Modeling
Xingshan Zeng, Jing Li, Lu Wang and Kam-Fai Wong

Different Absorption from the Same Sharing: Sifted Multi-task Learning for Fake News Detection
Lianwei Wu, Yuan Rao, Haolin Jin, Ambreen Nazir and Ling Sun

Text-based inference of moral sentiment change
Jing Yi Xie, Renato Ferreira Pinto Junior, Graeme Hirst and Yang Xu

Detecting Causal Language Use in Science Findings
Bei Yu, Yingya Li and Jun Wang

Multilingual and Multi-Aspect Hate Speech Analysis
Nedjma Ousidhoum, Zizheng Lin, Hongming Zhang, Yangqiu Song and Dit-Yan Yeung

MultiFC: A Real-World Multi-Domain Dataset for Evidence-Based Fact Checking of Claims
Isabelle Augenstein, Christina Lioma, Dongsheng Wang, Lucas Chaves Lima, Casper Hansen, Christian Hansen and Jakob Grue Simonsen

A Deep Neural Information Fusion Architecture for Textual Network Embeddings
Zenan Xu, Qinliang Su, Xiaojun Quan and Weijia Zhang

You Shall Know a User by the Company It Keeps: Dynamic Representations for Social Media Users in NLP
Marco Del Tredici, Diego Marcheggiani, Sabine Schulte im Walde and Raquel Fernández

Adaptive Ensembling: Unsupervised Domain Adaptation for Political Document Analysis
Shrey Desai, Barea Sinno, Alex Rosenfeld and Junyi Jessy Li

Macrocosm: Social Media Persona Linking for Open Source Intelligence Applications
Graham Horwood, Ning Yu, Thomas Boggs, Changjiang Yang and Chad Holvenstot

A Hierarchical Location Prediction Neural Network for Twitter User Geolocation
Binxuan Huang and Kathleen Carley

Trouble on the Horizon: Forecasting the Derailment of Online Conversations as they Develop
Jonathan P. Chang and Cristian Danescu-Niculescu-Mizil

A Benchmark Dataset for Learning to Intervene in Online Hate Speech
Jing Qian, Anna Bethke, Yinyin Liu, Elizabeth Belding and William Yang Wang

Detecting and Reducing Bias in a High Stakes Domain
Ruiqi Zhong, Yanda Chen, Desmond Patton, Charlotte Selous and Kathy McKeown

CodeSwitch-Reddit: Exploration of Written Multilingual Discourse in Online Discussion Forums
Ella Rabinovich, Masih Sultani and Suzanne Stevenson

Modeling Conversation Structure and Temporal Dynamics for Jointly Predicting Rumor Stance and Veracity
Penghui Wei, Nan Xu and Wenji Mao

[TACL] *Measuring Online Debaters' Persuasive Skill from Text over Time*
Kelvin Luu, Chenhao Tan and Noah Smith

Reconstructing Capsule Networks for Zero-shot Intent Classification
Han Liu, Xiaotong Zhang, Lu Fan, Xuandi Fu, Qimai Li, Xiao-Ming Wu and Albert Y.S. Lam

Domain Adaptation for Person-Job Fit with Transferable Deep Global Match Network
Shuqing Bian, Wayne Xin Zhao, Yang Song, Tao Zhang and Ji-Rong Wen

Heterogeneous Graph Attention Networks for Semi-supervised Short Text Classification
Hu Linmei, Tianchi Yang, Chuan Shi, Houye Ji and Xiaoli Li

Comparing and Developing Tools to Measure the Readability of Domain-Specific Texts
Elissa Redmiles, Lisa Maszkiewicz, Emily Hwang, Dhruv Kuchhal, Everest Liu, Miraida Morales, Denis Peskov, Sudha Rao, Rock Stevens, Kristina Gligorić, Sean Kross, Michelle Mazurek and Hal Daumé III

News2vec: News Network Embedding with Subnode Information
Ye Ma, Lu Zong, Yikang Yang and Jionglong Su

Recursive Context-Aware Lexical Simplification
Sian Gooding and Ekaterina Kochmar

Leveraging Medical Literature for Section Prediction in Electronic Health Records
Sara Rosenthal, Ken Barker and Zhicheng Liang

Neural News Recommendation with Heterogeneous User Behavior
Chuhan Wu, Fangzhao Wu, Mingxiao An, Tao Qi, Jianqiang Huang, Yongfeng Huang and Xing Xie

Reviews Meet Graphs: Enhancing User and Item Representations for Recommendation with Hierarchical Attentive Graph Neural Network
Chuhan Wu, Fangzhao Wu, Tao Qi, Suyu Ge, Yongfeng Huang and Xing Xie

Event Representation Learning Enhanced with External Commonsense Knowledge
Xiao Ding, Kuo Liao, Ting Liu, Zhongyang Li and Junwen Duan

Learning to Discriminate Perturbations for Blocking Adversarial Attacks in Text Classification
Yichao Zhou, Jyun-Yu Jiang, Kai-Wei Chang and Wei Wang

A Neural Citation Count Prediction Model based on Peer Review Text
Siqing Li, Wayne Xin Zhao, Eddy Jing Yin and Ji-Rong Wen

Connecting the Dots: Document-level Neural Relation Extraction with Edge-oriented Graphs
Fenia Christopoulou, Makoto Miwa and Sophia Ananiadou

Semi-supervised Text Style Transfer: Cross Projection in Latent Space
Mingyue Shang, Piji Li, Zhenxin Fu, Lidong Bing, Dongyan Zhao, Shuming Shi and Rui Yan

Question Answering for Privacy Policies: Combining Computational and Legal Perspectives
Abhilasha Ravichander, Alan W Black, Shomir Wilson, Thomas Norton and Norman Sadeh

Stick to the Facts: Learning towards a Fidelity-oriented E-Commerce Product Description Generation
Zhangming Chan, Xiuying Chen, Yongliang Wang, Juntao Li, Zhiqiang Zhang, Kun Gai, Dongyan Zhao and Rui Yan

Fine-Grained Entity Typing via Hierarchical Multi Graph Convolutional Networks
Hailong Jin, Lei Hou, Juanzi Li and Tiansi Dong

Learning to Infer Entities, Properties and their Relations from Clinical Conversations
Nan Du, Mingqiu Wang, Linh Tran, Gang Lee and Izhak Shafran

Practical Correlated Topic Modeling and Analysis via the Rectified Anchor Word Algorithm
Moontae Lee, Sungjun Cho, David Bindel and David Mimno

Modeling the Relationship between User Comments and Edits in Document Revision
Xuchao Zhang, Dheeraj Rajagopal, Michael Gamon, Sujay Kumar Jauhar and ChangTien Lu

PRADO: Projection Attention Networks for Document Classification On-Device
Karthik Krishnamoorthi, Sujith Ravi and Zornitsa Kozareva

Subword Language Model for Query Auto-Completion
Gyuwan Kim

Enhancing Dialogue Symptom Diagnosis with Global Attention and Symptom Graph
Xinzhu Lin, Xiahui He, Qin Chen, Huaixiao Tou, Zhongyu Wei and Ting Chen

Thursday, November 7, 2019 (continued)

[DEMO] *TEASPN: Framework and Protocol for Integrated Writing Assistance Environments*
Masato Hagiwara, Takumi Ito, Tatsuki Kuribayashi, Jun Suzuki and Kentaro Inui

[DEMO] *Journalist-in-the-Loop: Continuous Learning as a Service for Rumour Analysis*
Twin Karmakharm, Nikolaos Aletras and Kalina Bontcheva

[DEMO] *MAssistant: A Personal Knowledge Assistant for MOOC Learners*
Lan Jiang, Shuhan Hu, Mingyu Huang, Zhichun Wang, Jinjian Yang, Xiaoju Ye and Wei Zheng

[DEMO] *A Stylometry Toolkit for Latin Literature*
Thomas J. Bolt, Jeffrey H. Flynt, Pramit Chaudhuri and Joseph P. Dexter

[DEMO] *Tanbih: Get To Know What You Are Reading*
Yifan Zhang, Giovanni Da San Martino, Alberto Barrón-Cedeño, Salvatore Romeo, Jisun An, Haewoon Kwak, Todor Staykovski, Israa Jaradat, Georgi Karadzhov, Ramy Baly, Kareem Darwish, James Glass and Preslav Nakov

[DEMO] *Visualizing Trends of Key Roles in News Articles*
Chen Xia, Haoxiang Zhang, Jacob Moghtader, Allen Wu and Kai-Wei Chang

12:00–12:30 *Lunch*

12:30–13:30 *SIGDAT Business Meeting*

13:30–15:00 *Session 10*

Session 10A: Generation II

13:30–13:48 *Counterfactual Story Reasoning and Generation*
Lianhui Qin, Antoine Bosselut, Ari Holtzman, Chandra Bhagavatula, Elizabeth Clark and Yejin Choi

13:48–14:06 *Encode, Tag, Realize: High-Precision Text Editing*
Eric Malmi, Sebastian Krause, Sascha Rothe, Daniil Mirylenka and Aliaksei Severyn

14:06–14:24 *Answer-guided and Semantic Coherent Question Generation in Open-domain Conversation*
Weichao Wang, Shi Feng, Daling Wang and Yifei Zhang

14:24–14:42 *Read, Attend and Comment: A Deep Architecture for Automatic News Comment Generation*
Ze Yang, Can Xu, wei wu and zhoujun li

14:42–15:00 *A Topic Augmented Text Generation Model: Joint Learning of Semantics and Structural Features*
hongyin tang, Miao Li and Beihong Jin

Session 10B: Speech, Vision, Robotics, Multimodal and Grounding II

13:30–13:48 *LXMERT: Learning Cross-Modality Encoder Representations from Transformers*
Hao Tan and Mohit Bansal

13:48–14:06 *Phrase Grounding by Soft-Label Chain Conditional Random Field*
Jiacheng Liu and Julia Hockenmaier

14:06–14:24 *What You See is What You Get: Visual Pronoun Coreference Resolution in Dialogues*
Xintong Yu, Hongming Zhang, Yangqiu Song, Yan Song and Changshui Zhang

14:24–14:42 *YouMakeup: A Large-Scale Domain-Specific Multimodal Dataset for Fine-Grained Semantic Comprehension*
Weiying Wang, Yongcheng Wang, Shizhe Chen and Qin Jin

14:42–15:00 *DEBUG: A Dense Bottom-Up Grounding Approach for Natural Language Video Localization*
Chujie Lu, Long Chen, Chilie Tan, Xiaolin Li and Jun Xiao

Session 10C: Information Extraction III

13:30–13:48 *CrossWeigh: Training Named Entity Tagger from Imperfect Annotations*
Zihan Wang, Jingbo Shang, Liyuan Liu, Lihao Lu, Jiacheng Liu and Jiawei Han

13:48–14:06 *A Little Annotation does a Lot of Good: A Study in Bootstrapping Low-resource Named Entity Recognizers*
Aditi Chaudhary, Jiateng Xie, Zaid Sheikh, Graham Neubig and Jaime Carbonell

14:06–14:24 *Open Domain Web Keyphrase Extraction Beyond Language Modeling*
Lee Xiong, Chuan Hu, Chenyan Xiong, Daniel Campos and Arnold Overwijk

14:24–14:42 *TuckER: Tensor Factorization for Knowledge Graph Completion*
Ivana Balazevic, Carl Allen and Timothy Hospedales

14:42–15:00 [TACL] *Weakly Supervised Domain Detection*
Yumo Xu and Mirella Lapata

Session 10D: Information Retrieval and Document Analysis II

13:30–13:48 *Human-grounded Evaluations of Explanation Methods for Text Classification*
Piyawat Lertvittayakumjorn and Francesca Toni

13:48–14:06 *A Context-based Framework for Modeling the Role and Function of On-line Resource Citations in Scientific Literature*
He Zhao, Zhunchen Luo, Chong Feng, Anqing Zheng and Xiaopeng Liu

14:06–14:24 *Adversarial Reprogramming of Text Classification Neural Networks*
Paarth Neekhara, Shehzeen Hussain, Shlomo Dubnov and Farinaz Koushanfar

14:24–14:42 *Document Hashing with Mixture-Prior Generative Models*
Wei Dong, Qinliang Su, Dinghan Shen and Changyou Chen

14:42–15:00 *On Efficient Retrieval of Top Similarity Vectors*
Shulong Tan, Zhixin Zhou, Zhaozhuo Xu and Ping Li

Poster and Demo Session 10: Sentiment Analysis and Argument Mining, Lexical Semantics, Sentence-level Semantics

Multiplex Word Embeddings for Selectional Preference Acquisition
Hongming Zhang, Jiaxin Bai, Yan Song, Kun Xu, Changlong Yu, Yangqiu Song, Wilfred Ng and Dong Yu

MulCode: A Multiplicative Multi-way Model for Compressing Neural Language Model
Yukun Ma, Patrick H. Chen and Cho-Jui Hsieh

It's All in the Name: Mitigating Gender Bias with Name-Based Counterfactual Data Substitution
Rowan Hall Maudslay, Hila Gonen, Ryan Cotterell and Simone Teufel

Examining Gender Bias in Languages with Grammatical Gender
Pei Zhou, Weijia Shi, Jieyu Zhao, Kuan-Hao Huang, Muhao Chen, Ryan Cotterell and Kai-Wei Chang

Weakly Supervised Cross-lingual Semantic Relation Classification via Knowledge Distillation
Yogarshi Vyas and Marine Carpuat

Improved Word Sense Disambiguation Using Pre-Trained Contextualized Word Representations
Christian Hadiwinoto, Hwee Tou Ng and Wee Chung Gan

Do NLP Models Know Numbers? Probing Numeracy in Embeddings
Eric Wallace, Yizhong Wang, Sujian Li, Sameer Singh and Matt Gardner

A Split-and-Recombine Approach for Follow-up Query Analysis
Qian Liu, Bei Chen, Haoyan Liu, Jian-Guang LOU, Lei Fang, Bin Zhou and Dongmei Zhang

Text2Math: End-to-end Parsing Text into Math Expressions
Yanyan Zou and Wei Lu

Editing-Based SQL Query Generation for Cross-Domain Context-Dependent Questions
Rui Zhang, Tao Yu, Heyang Er, Sungrok Shim, Eric Xue, Xi Victoria Lin, Tianze Shi, Caiming Xiong, Richard Socher and Dragomir Radev

Syntax-aware Multilingual Semantic Role Labeling
Shexia He, Zuchao Li and Hai Zhao

Cloze-driven Pretraining of Self-attention Networks
Alexei Baevski, Sergey Edunov, Yinhan Liu, Luke Zettlemoyer and Michael Auli

Bridging the Gap between Relevance Matching and Semantic Matching for Short Text Similarity Modeling
Jinfeng Rao, Linqing Liu, Yi Tay, Wei Yang, Peng Shi and Jimmy Lin

A Syntax-aware Multi-task Learning Framework for Chinese Semantic Role Labeling
Qingrong Xia, Zhenghua Li and Min Zhang

Transfer Fine-Tuning: A BERT Case Study
Yuki Arase and Jun'ichi Tsujii

Data-Anonymous Encoding for Text-to-SQL Generation
Zhen Dong, Shizhao Sun, Hongzhi Liu, Jian-Guang Lou and Dongmei Zhang

Capturing Argument Interaction in Semantic Role Labeling with Capsule Networks
Xinchi Chen, Chunchuan Lyu and Ivan Titov

Learning Programmatic Idioms for Scalable Semantic Parsing
Srinivasan Iyer, Alvin Cheung and Luke Zettlemoyer

JuICe: A Large Scale Distantly Supervised Dataset for Open Domain Context-based Code Generation
Rajas Agashe, Srinivasan Iyer and Luke Zettlemoyer

Model-based Interactive Semantic Parsing: A Unified Framework and A Text-to-SQL Case Study
Ziyu Yao, Yu Su, Huan Sun and Wen-tau Yih

Modeling Graph Structure in Transformer for Better AMR-to-Text Generation
Jie Zhu, Junhui Li, Muhua Zhu, Longhua Qian, Min Zhang and Guodong Zhou

Syntax-Aware Aspect Level Sentiment Classification with Graph Attention Networks
Binxuan Huang and Kathleen Carley

Learning Explicit and Implicit Structures for Targeted Sentiment Analysis
Hao Li and Wei Lu

Capsule Network with Interactive Attention for Aspect-Level Sentiment Classification
Chunning Du, Haifeng Sun, Jingyu Wang, Qi Qi, Jianxin Liao, Tong Xu and Ming Liu

Emotion Detection with Neural Personal Discrimination
Xiabing Zhou, Zhongqing Wang, Shoushan Li, Guodong Zhou and Min Zhang

Specificity-Driven Cascading Approach for Unsupervised Sentiment Modification
Pengcheng Yang, Junyang Lin, Jingjing Xu, Jun Xie, Qi Su and Xu SUN

LexicalAT: Lexical-Based Adversarial Reinforcement Training for Robust Sentiment Classification
Jingjing Xu, Liang Zhao, Hanqi Yan, Qi Zeng, Yun Liang and Xu SUN

Leveraging Structural and Semantic Correspondence for Attribute-Oriented Aspect Sentiment Discovery
Zhe Zhang and Munindar Singh

From the Token to the Review: A Hierarchical Multimodal approach to Opinion Mining
Alexandre Garcia, Pierre Colombo, Florence d'Alché-Buc, Slim Essid and Chloé Clavel

Shallow Domain Adaptive Embeddings for Sentiment Analysis
Prathusha K Sarma, Yingyu Liang and William Sethares

Domain-Invariant Feature Distillation for Cross-Domain Sentiment Classification
Mengting Hu, Yike Wu, Shiwan Zhao, Honglei Guo, Renhong Cheng and Zhong Su

A Novel Aspect-Guided Deep Transition Model for Aspect Based Sentiment Analysis
Yunlong Liang, Fandong Meng, Jinchao Zhang, Jinan Xu, Yufeng Chen and Jie Zhou

Human-Like Decision Making: Document-level Aspect Sentiment Classification via Hierarchical Reinforcement Learning
Jingjing Wang, Changlong Sun, Shoushan Li, Jiancheng Wang, Luo Si, Min Zhang, Xiaozhong Liu and Guodong Zhou

A Dataset of General-Purpose Rebuttal
Matan Orbach, Yonatan Bilu, Ariel Gera, Yoav Kantor, Lena Dankin, Tamar Lavee, Lili Kotlerman, Shachar Mirkin, Michal Jacovi, Ranit Aharonov and Noam Slonim

Rethinking Attribute Representation and Injection for Sentiment Classification
Reinald Kim Amplayo

A Knowledge Regularized Hierarchical Approach for Emotion Cause Analysis
Chuang Fan, Hongyu Yan, Jiachen Du, Lin Gui, Lidong Bing, Min Yang, Ruifeng Xu and Ruibin Mao

Automatic Argument Quality Assessment - New Datasets and Methods
Assaf Toledo, Shai Gretz, Edo Cohen-Karlik, Roni Friedman, Elad Venezian, Dan Lahav, Michal Jacovi, Ranit Aharonov and Noam Slonim

Fine-Grained Analysis of Propaganda in News Article
Giovanni Da San Martino, Seunghak Yu, Alberto Barrón-Cedeño, Rostislav Petrov and Preslav Nakov

Context-aware Interactive Attention for Multi-modal Sentiment and Emotion Analysis
Dushyant Singh Chauhan, Md Shad Akhtar, Asif Ekbal and Pushpak Bhattacharyya

Sequential Learning of Convolutional Features for Effective Text Classification
Avinash Madasu and Vijjini Anvesh Rao

The Role of Pragmatic and Discourse Context in Determining Argument Impact
Esin Durmus, Faisal Ladhak and Claire Cardie

Aspect-Level Sentiment Analysis Via Convolution over Dependency Tree
Kai Sun, Richong Zhang, Samuel Mensah, Yongyi Mao and Xudong Liu

15:00–15:30 *Coffee Break*

15:30–16:18 *Session 11*

Session 11A: Machine Translation and Multilinguality III

15:30–15:42 *Understanding Data Augmentation in Neural Machine Translation: Two Perspectives towards Generalization*
Guanlin Li, Lemao Liu, Guoping Huang, Conghui Zhu and Tiejun Zhao

15:42–15:54 *Simple and Effective Noisy Channel Modeling for Neural Machine Translation*
Kyra Yee, Yann Dauphin and Michael Auli

15:54–16:06 *MultiFiT: Efficient Multi-lingual Language Model Fine-tuning*
Julian Eisenschlos, Sebastian Ruder, Piotr Czapla, Marcin Kadras, Sylvain Gugger and Jeremy Howard

16:06–16:18 *Hint-Based Training for Non-Autoregressive Machine Translation*
Zhuohan Li, Zi Lin, Di He, Fei Tian, Tao QIN, Liwei WANG and Tie-Yan Liu

Session 11B: Syntax, Parsing, and Linguistic Theories

15:30–15:42 *Working Hard or Hardly Working: Challenges of Integrating Typology into Neural Dependency Parsers*
Adam Fisch, Jiang Guo and Regina Barzilay

15:42–15:54 *Cross-Lingual BERT Transformation for Zero-Shot Dependency Parsing*
Yuxuan Wang, Wanxiang Che, Jiang Guo, Yijia Liu and Ting Liu

15:54–16:06 *Multilingual Grammar Induction with Continuous Language Identification*
Wenjuan Han, Ge Wang, Yong Jiang and Kewei Tu

16:06–16:18 *Quantifying the Semantic Core of Gender Systems*
Adina Williams, Damian Blasi, Lawrence Wolf-Sonkin, Hanna Wallach and Ryan Cotterell

Session 11C: Sentiment and Social Media

15:30–15:42 *Perturbation Sensitivity Analysis to Detect Unintended Model Biases*
Vinodkumar Prabhakaran, Ben Hutchinson and Margaret Mitchell

15:42–15:54 *Automatically Inferring Gender Associations from Language*
Serina Chang and Kathy McKeown

15:54–16:06 *Reporting the Unreported: Event Extraction for Analyzing the Local Representation of Hate Crimes*
Aida Mostafazadeh Davani, Leigh Yeh, Mohammad Atari, Brendan Kennedy, Gwenyth Portillo Wightman, Elaine Gonzalez, Natalie Delong, Rhea Bhatia, Arineh Mirinjian, Xiang Ren and Morteza Dehghani

16:06–16:18 *Minimally Supervised Learning of Affective Events Using Discourse Relations*
Jun Saito, Yugo Murawaki and Sadao Kurohashi

Session 11D: Information Extraction IV

15:30–15:42 *Event Detection with Multi-Order Graph Convolution and Aggregated Attention*
Haoran Yan, Xiaolong Jin, Xiangbin Meng, Jiafeng Guo and Xueqi Cheng

15:42–15:54 *Coverage of Information Extraction from Sentences and Paragraphs*
Simon Razniewski, Nitisha Jain, Paramita Mirza and Gerhard Weikum

15:54–16:06 *HMEAE: Hierarchical Modular Event Argument Extraction*
Xiaozhi Wang, Ziqi Wang, Xu Han, Zhiyuan Liu, Juanzi Li, Peng Li, Maosong Sun, Jie Zhou and Xiang Ren

16:06–16:18 *Entity, Relation, and Event Extraction with Contextualized Span Representations*
David Wadden, Ulme Wennberg, Yi Luan and Hannaneh Hajishirzi

Poster and Demo Session 11: Discourse and Pragmatics, Linguistic Theories, Textual Inference, Question Answering, Summarization and Generation

Next Sentence Prediction helps Implicit Discourse Relation Classification within and across Domains
Wei Shi and Vera Demberg

Split or Merge: Which is Better for Unsupervised RST Parsing?
Naoki Kobayashi, Tsutomu Hirao, Kengo Nakamura, Hidetaka Kamigaito, Manabu Okumura and Masaaki Nagata

BERT for Coreference Resolution: Baselines and Analysis
Mandar Joshi, Omer Levy, Luke Zettlemoyer and Daniel Weld

Linguistic Versus Latent Relations for Modeling Coherent Flow in Paragraphs
Dongyeop Kang and Eduard Hovy

Event Causality Recognition Exploiting Multiple Annotators' Judgments and Background Knowledge
Kazuma Kadowaki, Ryu Iida, Kentaro Torisawa, Jong-Hoon Oh and Julien Kloetzer

What Part of the Neural Network Does This? Understanding LSTMs by Measuring and Dissecting Neurons
Ji Xin, Jimmy Lin and Yaoliang Yu

Quantity doesn't buy quality syntax with neural language models
Marten van Schijndel, Aaron Mueller and Tal Linzen

Higher-order Comparisons of Sentence Encoder Representations
Mostafa Abdou, Artur Kulmizev, Felix Hill, Daniel M. Low and Anders Søgaard

Text Genre and Training Data Size in Human-like Parsing
John Hale, Adhiguna Kuncoro, Keith Hall, Chris Dyer and Jonathan Brennan

Feature2Vec: Distributional semantic modelling of human property knowledge
Steven Derby, Paul Miller and Barry Devereux

Sunny and Dark Outside?! Improving Answer Consistency in VQA through Entailed Question Generation
Arijit Ray, Karan Sikka, Ajay Divakaran, Stefan Lee and Giedrius Burachas

GeoSQA: A Benchmark for Scenario-based Question Answering in the Geography Domain at High School Level
Zixian Huang, Yulin Shen, Xiao Li, Yu'ang Wei, Gong Cheng, Lin Zhou, Xinyu Dai and Yuzhong Qu

Revisiting the Evaluation of Theory of Mind through Question Answering
Matthew Le, Y-Lan Boureau and Maximilian Nickel

Multi-passage BERT: A Globally Normalized BERT Model for Open-domain Question Answering
Zhiguo Wang, Patrick Ng, Xiaofei Ma, Ramesh Nallapati and Bing Xiang

A Span-Extraction Dataset for Chinese Machine Reading Comprehension
Yiming Cui, Ting Liu, Wanxiang Che, Li Xiao, Zhipeng Chen, Wentao Ma, Shijin Wang and Guoping Hu

MICRON: Multigranular Interaction for Contextualizing RepresentatiON in Non-factoid Question Answering
Hojae Han, Seungtaek Choi, Haeju Park and Seung-won Hwang

Machine Reading Comprehension Using Structural Knowledge Graph-aware Network
Delai Qiu, Yuanzhe Zhang, Xinwei Feng, Xiangwen Liao, Wenbin Jiang, Yajuan Lyu, Kang Liu and Jun Zhao

Answering Conversational Questions on Structured Data without Logical Forms
Thomas Mueller, Francesco Piccinno, Peter Shaw, Massimo Nicosia and Yasemin Altun

Improving Answer Selection and Answer Triggering using Hard Negatives
Sawan Kumar, shweta garg, Kartik Mehta and Nikhil Rasiwasia

Can You Unpack That? Learning to Rewrite Questions-in-Context
Ahmed Elgohary, Denis Peskov and Jordan Boyd-Graber

Quoref: A Reading Comprehension Dataset with Questions Requiring Coreferential Reasoning
Pradeep Dasigi, Nelson F. Liu, Ana Marasovic, Noah A. Smith and Matt Gardner

Zero-shot Reading Comprehension by Cross-lingual Transfer Learning with Multilingual Language Representation Model
Tsung-Yuan Hsu, Chi-Liang Liu and Hung-yi Lee

QuaRTz: An Open-Domain Dataset of Qualitative Relationship Questions
Oyvind Tafjord, Matt Gardner, Kevin Lin and Peter Clark

Giving BERT a Calculator: Finding Operations and Arguments with Reading Comprehension
Daniel Andor, Luheng He, Kenton Lee and Emily Pitler

A Gated Self-attention Memory Network for Answer Selection
Tuan Lai, Quan Hung Tran, Trung Bui and Daisuke Kihara

Polly Want a Cracker: Analyzing Performance of Parroting on Paraphrase Generation Datasets
Hong-Ren Mao and Hung-Yi Lee

Query-focused Sentence Compression in Linear Time
Abram Handler and Brendan O'Connor

Generating Personalized Recipes from Historical User Preferences
Bodhisattwa Prasad Majumder, Shuyang Li, Jianmo Ni and Julian McAuley

Generating Highly Relevant Questions
Jiazuo Qiu and Deyi Xiong

Improving Neural Story Generation by Targeted Common Sense Grounding
Huanru Henry Mao, Bodhisattwa Prasad Majumder, Julian McAuley and Garrison Cottrell

Abstract Text Summarization: A Low Resource Challenge
Shantipriya Parida and Petr Motlicek

Generating Modern Poetry Automatically in Finnish
Mika Hämäläinen and Khalid Alnajjar

SUM-QE: a BERT-based Summary Quality Estimation Model
Stratos Xenouleas, Prodromos Malakasiotis, Marianna Apidianaki and Ion Androutsopoulos

An Empirical Comparison on Imitation Learning and Reinforcement Learning for Paraphrase Generation
Wanyu Du and Yangfeng Ji

Countering the Effects of Lead Bias in News Summarization via Multi-Stage Training and Auxiliary Losses
Matt Grenander, Yue Dong, Jackie Chi Kit Cheung and Annie Louis

Learning Rhyming Constraints using Structured Adversaries
Harsh Jhamtani, Sanket Vaibhav Mehta, Jaime Carbonell and Taylor Berg-Kirkpatrick

Question-type Driven Question Generation
Wenjie Zhou, Minghua Zhang and Yunfang Wu

Deep Reinforcement Learning with Distributional Semantic Rewards for Abstractive Summarization
Siyao Li, Deren Lei, Pengda Qin and William Yang Wang

Clause-Wise and Recursive Decoding for Complex and Cross-Domain Text-to-SQL Generation
Dongjun Lee

Do Nuclear Submarines Have Nuclear Captains? A Challenge Dataset for Commonsense Reasoning over Adjectives and Objects
James Mullenbach, Jonathan Gordon, Nanyun Peng and Jonathan May

Aggregating Bidirectional Encoder Representations Using MatchLSTM for Sequence Matching
Bo Shao, Yeyun Gong, Weizhen Qi, Nan Duan and Xiaola Lin

What Does This Word Mean? Explaining Contextualized Embeddings with Natural Language Definition
Ting-Yun Chang and Yun-Nung Chen

Pre-Training BERT on Domain Resources for Short Answer Grading
Chul Sung, Tejas Dhamecha, Swarnadeep Saha, Tengfei Ma, Vinay Reddy and Rishi Arora

WIQA: A dataset for "What if..." reasoning over procedural text
Niket Tandon, Bhavana Dalvi, Keisuke Sakaguchi, Peter Clark and Antoine Bosselut

Evaluating BERT for natural language inference: A case study on the CommitmentBank
Nanjiang Jiang and Marie-Catherine de Marneffe

Incorporating Domain Knowledge into Medical NLI using Knowledge Graphs
Soumya Sharma, Bishal Santra, Abhik Jana, Santosh Tokala, Niloy Ganguly and Pawan Goyal

16:18–16:30 *Mini-Break*

Thursday, November 7, 2019 (continued)

16:30–17:24 *Session 12*

Session 12A: Machine Translation and Multilinguality IV

16:30–16:48 *The FLORES Evaluation Datasets for Low-Resource Machine Translation: Nepali–English and Sinhala–English*
Francisco Guzmán, Peng-Jen Chen, Myle Ott, Juan Pino, Guillaume Lample, Philipp Koehn, Vishrav Chaudhary and Marc'Aurelio Ranzato

16:48–17:06 *Mask-Predict: Parallel Decoding of Conditional Masked Language Models*
Marjan Ghazvininejad, Omer Levy, Yinhan Liu and Luke Zettlemoyer

17:06–17:24 *Learning to Copy for Automatic Post-Editing*
Xuancheng Huang, Yang Liu, Huanbo Luan, Jingfang Xu and Maosong Sun

Session 12B: Lexical Semantics III

16:30–16:48 *Exploring Human Gender Stereotypes with Word Association Test*
Yupei Du, Yuanbin Wu and Man Lan

16:48–17:06 [TACL] *Still a Pain in the Neck: Evaluating Text Representations on Lexical Composition*
Vered Shwartz and Ido Dagan

17:06–17:24 [TACL] *Where's My Head? Definition, Dataset and Models for Numeric Fused-Heads Identification and Resolution*
Yanai Elazar and Yoav Goldberg

Session 12C: Generation III

16:30–16:48 *A Modular Architecture for Unsupervised Sarcasm Generation*
Abhijit Mishra, Tarun Tater and Karthik Sankaranarayanan

16:48–17:06 *Generating Classical Chinese Poems from Vernacular Chinese*
Zhichao Yang, Pengshan Cai, Yansong Feng, Fei Li, Weijiang Feng, Elena Suet-Ying Chiu and hong yu

17:06–17:24 *Set to Ordered Text: Generating Discharge Instructions from Medical Billing Codes*
Litton J Kurisinkel and Nancy Chen

Session 12D: Phonology, Word Segmentation, and Parsing

16:30–16:48 *Constraint-based Learning of Phonological Processes*
Shraddha Barke, Rose Kunkel, Nadia Polikarpova, Eric Meinhardt, Eric Bakovic and Leon Bergen

16:48–17:06 *Detect Camouflaged Spam Content via StoneSkipping: Graph and Text Joint Embedding for Chinese Character Variation Representation*
Zhuoren Jiang, Zhe Gao, Guoxiu He, Yangyang Kang, Changlong Sun, Qiong Zhang, Luo Si and Xiaozhong Liu

17:06–17:24 [TACL] *A Generative Model for Punctuation in Dependency Trees*
Xiang Lisa Li, Dingquan Wang and Jason Eisner

Poster and Demo Session 12: Information Extraction, Text Mining and NLP Applications, Social Media and Computational Social Science, Sentiment Analysis and Argument Mining

An Attentive Fine-Grained Entity Typing Model with Latent Type Representation
Ying Lin and Heng Ji

An Improved Neural Baseline for Temporal Relation Extraction
Qiang Ning, Sanjay Subramanian and Dan Roth

Improving Fine-grained Entity Typing with Entity Linking
Hongliang Dai, Donghong Du, Xin Li and Yangqiu Song

Combining Spans into Entities: A Neural Two-Stage Approach for Recognizing Discontiguous Entities
Bailin Wang and Wei Lu

Cross-Sentence N-ary Relation Extraction using Lower-Arity Universal Schemas
Kosuke Akimoto, Takuya Hiraoka, Kunihiko Sadamasa and Mathias Niepert

Gazetteer-Enhanced Attentive Neural Networks for Named Entity Recognition
Hongyu Lin, Yaojie Lu, Xianpei Han, Le Sun, Bin Dong and Shanshan Jiang

"A Buster Keaton of Linguistics": First Automated Approaches for the Extraction of Vossian Antonomasia
Michel Schwab, Robert Jäschke, Frank Fischer and Jannik Strötgen

Multi-Task Learning for Chemical Named Entity Recognition with Chemical Compound Paraphrasing
Taiki Watanabe, Akihiro Tamura, Takashi Ninomiya, Takuya Makino and Tomoya Iwakura

FewRel 2.0: Towards More Challenging Few-Shot Relation Classification
Tianyu Gao, Xu Han, Hao Zhu, Zhiyuan Liu, Peng Li, Maosong Sun and Jie Zhou

ner and pos when nothing is capitalized
Stephen Mayhew, Tatiana Tsygankova and Dan Roth

CaRB: A Crowdsourced Benchmark for Open IE
Sangnie Bhardwaj, Samarth Aggarwal and Mausam Mausam

Weakly Supervised Attention Networks for Entity Recognition
Barun Patra and Joel Ruben Antony Moniz

Revealing and Predicting Online Persuasion Strategy with Elementary Units
Gaku Morio, Ryo Egawa and Katsuhide Fujita

A Challenge Dataset and Effective Models for Aspect-Based Sentiment Analysis
Qingnan Jiang, Lei Chen, Ruifeng Xu, Xiang Ao and Min Yang

Learning with Noisy Labels for Sentence-level Sentiment Classification
Hao Wang, Bing Liu, Chaozhuo Li, Yan Yang and Tianrui Li

DENS: A Dataset for Multi-class Emotion Analysis
Chen Liu, Muhammad Osama and Anderson De Andrade

Multi-Task Stance Detection with Sentiment and Stance Lexicons
Yingjie Li and Cornelia Caragea

A Robust Self-Learning Framework for Cross-Lingual Text Classification
Xin Dong and Gerard de Melo

Learning to Flip the Sentiment of Reviews from Non-Parallel Corpora
Canasai Kruengkrai

Label Embedding using Hierarchical Structure of Labels for Twitter Classification
Taro Miyazaki, Kiminobu Makino, Yuka Takei, Hiroki Okamoto and Jun Goto

Interpretable Word Embeddings via Informative Priors
Miriam Hurtado Bodell, Martin Arvidsson and Måns Magnusson

Adversarial Removal of Demographic Attributes Revisited
Maria Barrett, Yova Kementchedjhieva, Yanai Elazar, Desmond Elliott and Anders Søgaard

A deep-learning framework to detect sarcasm targets
Jasabanta Patro, Srijan Bansal and Animesh Mukherjee

In Plain Sight: Media Bias Through the Lens of Factual Reporting
Lisa Fan, Marshall White, Eva Sharma, Ruisi Su, Prafulla Kumar Choubey, Ruihong Huang and Lu Wang

Incorporating Label Dependencies in Multilabel Stance Detection
William Ferreira and Andreas Vlachos

Investigating Sports Commentator Bias within a Large Corpus of American Football Broadcasts
Jack Merullo, Luke Yeh, Abram Handler, Alvin Grissom II, Brendan O'Connor and Mohit Iyyer

Charge-Based Prison Term Prediction with Deep Gating Network
Huajie Chen, Deng Cai, Wei Dai, Zehui Dai and Yadong Ding

Restoring ancient text using deep learning: a case study on Greek epigraphy
Yannis Assael, Thea Sommerschield and Jonathan Prag

Embedding Lexical Features via Tensor Decomposition for Small Sample Humor Recognition
Zhenjie Zhao, Andrew Cattle, Evangelos Papalexakis and Xiaojuan Ma

EDA: Easy Data Augmentation Techniques for Boosting Performance on Text Classification Tasks
Jason Wei and Kai Zou

Neural News Recommendation with Multi-Head Self-Attention
Chuhan Wu, Fangzhao Wu, Suyu Ge, Tao Qi, Yongfeng Huang and Xing Xie

What Matters for Neural Cross-Lingual Named Entity Recognition: An Empirical Analysis
Xiaolei Huang, Jonathan May and Nanyun Peng

Telling the Whole Story: A Manually Annotated Chinese Dataset for the Analysis of Humor in Jokes
Dongyu Zhang, Heting Zhang, Xikai Liu, Hongfei LIN and Feng Xia

Generating Natural Anagrams: Towards Language Generation Under Hard Combinatorial Constraints
Masaaki Nishino, Sho Takase, Tsutomu Hirao and Masaaki Nagata

STANCY: Stance Classification Based on Consistency Cues
Kashyap Popat, Subhabrata Mukherjee, Andrew Yates and Gerhard Weikum

Cross-lingual intent classification in a low resource industrial setting
Talaat Khalil, Kornel Kiełczewski, Georgios Christos Chouliaras, Amina Keldibek and Maarten Versteegh

SoftRegex: Generating Regex from Natural Language Descriptions using Softened Regex Equivalence
Jun-U Park, Sang-Ki Ko, Marco Cognetta and Yo-Sub Han

Using Clinical Notes with Time Series Data for ICU Management
Swaraj Khadanga, Karan Aggarwal, Shafiq Joty and Jaideep Srivastava

Spelling-Aware Construction of Macaronic Texts for Teaching Foreign-Language Vocabulary
Adithya Renduchintala, Philipp Koehn and Jason Eisner

Towards Machine Reading for Interventions from Humanitarian-Assistance Program Literature
Bonan Min, Yee Seng Chan, Haoling Qiu and Joshua Fasching

RUN through the Streets: A New Dataset and Baseline Models for Realistic Urban Navigation
Tzuf Paz-Argaman and Reut Tsarfaty

Context-Aware Conversation Thread Detection in Multi-Party Chat
Ming Tan, Dakuo Wang, Yupeng Gao, Haoyu Wang, Saloni Potdar, Xiaoxiao Guo, Shiyu Chang and Mo Yu

17:24–17:30 *Mini-Break*

17:30–18:00 *Best Paper Awards and Closing*