

EMNLP 2020

**2020 Conference on Empirical Methods in
Natural Language Processing**

Proceedings of the Conference

November 16–20, 2020

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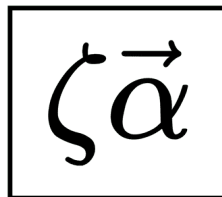
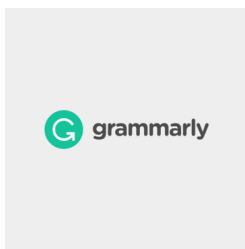
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Preface by the General Chair

Like my colleague, Dan Jurafsky, General Chair of ACL-2020, the first ACL conference to be hit by the virus that has up-ended our world, I am sitting at my laptop, in the same chair I have sat in since March 2020, to welcome you to EMNLP-2020. It is also where I am likely to be sitting for EMNLP-2020 itself.

As in previous years, the purpose of the General Chair’s preface to express thanks — first, to the obvious people whose heroic efforts brought such a large conference to fruition, including:

- the three Programme Co-Chairs — Trevor Cohn, Yulan He and Yang Liu — who oversaw a process in which 3677 papers were submitted for review from 57 countries;
- the Senior Area Chairs, Area Chairs and reviewers whose expertise enabled authors to learn from their reviews and to deliver papers that improved on their original submissions;
- the Publication Co-Chairs — Yang Gao, Veronika Laippala and Philippe Muller — and the experience they gained from the General Publication Chair, Fei Liu, who met the challenge of identifying and correcting the myriad ways in which papers could be mis-formatted and assembled the result into our conference proceedings
- the Co-Chairs of *Findings of the ACL* – Jing Li and Lemaou Liu – ACL’s new publication venue, and Kushal Arora, who implemented a new process for matching Findings papers to workshops where they might be presented;
- the Tutorial Co-Chairs — Aline Villavicencio and Benjamin Van Durme — who selected the seven tutorials to be presented at the conference;
- the Demonstration Co-Chairs — Qun Liu and David Schlangen — who did the same for the 35 demos that we will see over the course of the conference;
- the new Ethics Co-Chairs — Dirk Hovy and Karèn Fort — who undertook the delicate task of checking papers that had been flagged for potential ethics issues;
- our website chair, Andy MacKinlay, who ensured that the EMNLP-2020 website stayed fit for purpose.

But, in addition, we must also thank others whose support has been critical to both virtualizing EMNLP-2020 and keeping the community engaged with it —

- the members of the Virtual Infra-structure Committee, co-chaired by Jan-Christoph Klie and Zhongyu Wei — Eduardo Blanco, Yang Feng and Yansong Feng — helped by advisors from the ACL-2020 Virtual Infra-structure Committee — Hao Fang, Sudha Rao and Xiruo Ding;
- the Volunteer Coordinator — Kellie Webster — who managed to attract over 200 student and early career volunteers willing to help make EMNLP a success;
- of those student and early career volunteers, those who shouldered responsibility for important parts of the infra-structure, including Luciana Benotti and Cyril Weerasooriya (RocketChat), Ed Howard-Jones (HelpDesk), and Gisela Vallejo (Zoom);
- also of those student and early career volunteers, those who undertook to build booths for our sponsors — Kaushal Kumar Maurya, Francisco Xavier Sumba Toral, Saichethan M. Reddy, Shirley Anugrah Hayati, Manan Dey, Eraldo R. Fernandes, Arshiya Aggarwal, Alfredo Lozano, Jiaxin Pei, Junheng Hao, Reem Al-Yami, Anish Mohan, Christian Kavouras, Tornike Tsereteli, Emily Chen, Wiem Ben Rim and Chandrahas;

- the Publicity Co-chairs — Anna Rogers and Ruifeng Xu — who have served as both the voice of EMNLP in communicating with the community and as its ears, reporting on community concerns as soon as they were expressed;
- the Workshop Co-chairs — Jackie Chi Kit Cheung and Lonneke van der Plas — whose work in selecting the 24 workshops for EMNLP-2020 turned out to be only the start of ensuring that the workshops could successfully run virtually;
- the Diversity & Inclusion Chairs – Isabelle Augenstein and Chris Brew — and the D&I Student Chairs – Murathan Kurfali and Prathyusha Jwalapuram — who have worked tirelessly to make EMNLP as welcoming and inclusive as possible for all participants. The activities that they have worked with community members to create (Birds of a Feather sessions, Affinity Group sessions, student panels, Mentoring sessions and Coffee Socials) should contribute to reinforcing us as a community (and as sub-groups within the community), despite not being together physically.

We also want to express special thanks to Priscilla Rasmussen, the ACL Business Manager, first for booking EMNLP 2020 into a beautiful resort in the Dominican Republic, and then for getting the booking postponed until EMNLP 2021.

Last but not least, I would like to express gratitude to our sponsors, whose generous support has been invaluable in building up EMNLP to what it is now. These include our Diamond-level sponsors — Bloomberg Engineering, Google Research, Apple and Amazon Science; our Platinum-level sponsors — Baidu, Megagon Labs, Facebook and DeepMind; our Gold-level sponsors — Grammarly, ByteDance and Zeta Alpha; our Silver-level sponsors — Babelscape, Naver, Adobe, Hitachi and Salesforce; and our Bronze-level sponsor — USC ISI. DeepMind has also generously contributed to supporting our Diversity & Inclusion activities.

EMNLP 2020 General Chair

Bonnie Webber, University of Edinburgh, UK

Preface by the Program Committee Co-Chairs

Welcome to EMNLP 2020!

Due to the unprecedented situation with the Covid-19 pandemic, EMNLP 2020 will be held completely online this year. We decided to move EMNLP to a virtual format early on, when the pandemic just started, and postponed the paper submission deadlines by three weeks such that authors affected by the pandemic could have more time for their paper submissions. This resulted in a much tighter schedule for paper review and decisions, as well as publications, workshop programs, virtual infrastructure, etc. However, thanks to everyone’s hard work, we made it.

We received a record number of 3,677 submissions. This is a significant increase of 26% over EMNLP 2019, making it the largest NLP conference to date in terms of paper submissions. After removing withdrawals and desk rejecting papers which violated our formatting requirements, the anonymity policy, or double submission policy, 3,359 submissions were sent out for review. Despite the sharp increase in submissions, we kept the acceptance rates at a similar level as past years. The acceptance statistics are shown below:

	Long	Short	Total
Reviewed	2,455	904	3,359
Accepted	602	150	752
Acceptance Rate	24.6%	16.6%	22.4%

It is important to have a well-organized review structure to handle a large number of submissions. We first set up a total of 21 tracks (including a special Multidisciplinary and Area Chair Conflict of Interest track) based on the track information in past conferences such as ACL 2020, EMNLP 2019 and NAACL 2019. We used the submission numbers per track from past conferences to estimate the number of Senior Area Chairs (SACs) and Area Chairs (ACs) required for each track. We eventually recruited 33 SACs and 196 ACs.

For reviewer recruitment, we started with the reviewer lists from NAACL 2019, EMNLP 2019 and ACL 2020 and sent out initial invitations asking reviewers to express their track preferences. In addition, we introduced a new policy that in order to submit paper(s) to EMNLP, at least one author must be nominated to serve as a reviewer (usually the most senior author) and for that author to take on a full load of up to 6 reviews. We filtered out some reviewers who were less experienced in paper review or did not hold a PhD degree (except those final-year PhD students). We then passed the reviewer list to SACs and asked them to select from these candidate reviewers based on their expertise and semantic scholar profiles. Overall, this resulted in a total of 2,633 reviewers.

For AC assignments, we matched papers with ACs automatically based on comparing submissions’ abstracts with ACs’ past papers in ACL* venues, using semantic scholar to harvest this data. For reviewer assignment, we generated a “seniority score” for each reviewer based on their past publication record and recent ACL* papers. Where possible, we have ensured every paper has at least one “senior” reviewer and not more than one “junior” reviewer.

As a result of ever increasing paper submissions, review quality is a pressing issue in our community. To help improve review quality, this year we prepared review guidelines with explicit dos and don’ts. We observed many cases where authors called out problems in reviews for these papers based on these guidelines, ACs took action, and reviewers revised their reviews. Overall the review guidelines seem to be well received by authors and reviewers, and we feel they lead to improved reviews in aggregate. Having said this, we emphasize that the guidelines are only a partial solution, and more work is needed

from the entire community to manage the increasing submissions and continue to maintain or improve review quality.

Authors resubmitting papers that were previously rejected from another publication venue were given the option of providing these previous reviews and a rejoinder as part of their submission. This was designed to accommodate authors who have improved their paper based on previous feedback, and feel they have addressed the key issues raised, and would benefit from having this considered as part of the EMNLP review process. Roughly, this is designed to mimic the “revise-and-resubmit” procedure in a journal. These “sticky reviews” were made available to the AC, SACs and PCs, but not the reviewers, lest it bias their assessments. A total of 349 submissions used this facility. While we do not have firm numbers confirming the utility of sticky reviews, we feel that it was useful for making decisions for borderline submissions, where the past reviews and quality of the rejoinder could be used to justify paper acceptance.

This year we experimented with “*Findings*”, a new publication model based on an idea floated in the ACL reviewing committee, designed to allow more papers to be accepted for publication beyond those accepted to the main conference. Please see the Preface to the *Findings of ACL: EMNLP 2020* for a detailed description of this new initiative, including the acceptance rate and processes specific to this publication.

Another “first” was the formation of an ethics committee, which was assembled to provide input on submissions which were flagged by reviewers, ACs or SACs as needing further consideration on ethical grounds during the review process. This might relate to potential misuse of the work, the legality of use of data, ethics approvals for work involving human subjects, suspected plagiarism and more. The committee provided careful assessment to ensure these papers were treated uniformly and fairly, and these ethics assessments were considered alongside the reviews when making acceptance decisions. Ideally, authors would be given a chance to respond to the ethical assessments, however this was not possible given the reviewing timeline. We recommend this is something that should be factored into future conference planning.

Finally this year we introduced a Reproducibility Checklist in order to encourage reporting information necessary for reproducible research (thanks to Jesse Dodge and Noah Smith for initiating this). Many papers have included more details relating to code, data, and their experimental setup. 78% of reviewers felt the reproducibility checklist is useful or somewhat useful. In addition, EMNLP will join several major AI conferences in the upcoming ML Reproducibility Challenge (<https://paperswithcode.com/rc2020>). We hope you can participate in or contribute to the challenge. The current reproducibility checklist may not be a norm yet for our scientific community, but it is a step forward, and we expect it will lead to more reproducible published work in the future.

From the accepted papers, 5 papers were selected for awards, include a best long paper and 4 outstanding papers. Best paper candidates were initially selected based on recommendations from SACs and ACs, and then evaluated by the best paper committee. The award winners will be announced at the closing session.

In addition, EMNLP 2020 will feature 25 papers from Transactions of Association for Computational Linguistics (TACL), and 5 papers from the journal of Computational Linguistics.

We are excited to have three keynote talks, by Professor Claire Cardie (Cornell University) on information extraction, Dr. Rich Caruana (Microsoft) on interpretability in machine learning, and Professor Janet Pierrehumbert (University of Oxford) on linguistic behaviour and the realistic testing of NLP systems. We thank them for accepting our invitation to give the keynote speeches.

Another highlight of the program is the two panel sessions, one industry panel discussing NLP practice in industry and future directions, and another one on Ethics statements for future NLP paper submissions.

We thank all the panelists for joining the live discussions.

Putting together a virtual program is challenging. Based on the feedback on the ACL 2020 program, one of our goals is to provide more opportunities for authors and attendees to interact with each other and create an experience similar to in-person conferences. We have grouped papers into Zoom QA sessions (each session with 4-5 papers in similar areas) and Gather.towns (analogous to poster sessions where attendees can walk around and interact with paper authors). Doing this with timezone constraints is a hard optimization problem. We tried our best to make the program timezone friendly such that everyone is able to attend as many sessions as possible. However, the solutions are not perfect, and we appreciate everyone's understanding and cooperation.

We are grateful for many people's contributions in the past year. Without their help, EMNLP 2020 would not be possible. We thank:

- First our general chair, Bonnie Webber, who has provided us all the guidance we need and helped with many of our decision processes;
- Past ACL* PCs, including Jing Jiang, Vincent Ng, and Xiaojun Wan (EMNLP 2019), and Joyce Chai, Natalie Schluter, and Joel Tetreault (ACL 2020) for all the useful tips and suggestions about organizing NLP conferences;
- Amanda Stent and Graham Neubig for providing the code for reviewer COI detection and paper assignment, and their time in helping to get it running;
- 33 SACs who have helped us tremendously through the entire review process, from recruiting ACs and reviewers, paper assignment, to making final paper recommendation decisions and selection of best paper candidates;
- 196 ACs who led paper discussions, wrote meta reviews, and ensured review quality;
- 2,633 reviewers, 565 secondary reviewers for reviewing papers and actively participating in paper discussions;
- 8,682 authors for submitting their work to EMNLP;
- Our Publicity chairs Anna Rogers and Ruifeng Xu who keep us connected with the community, announce conference news on social media, follow EMNLP related online discussions, and collect feedback from the community;
- Publication chairs Fei Liu, Philippe Muller, Yang Gao, Veronika Laippala, Jing Li, and Lemao Liu for completing the proceedings within a shortened work period, including additional Findings proceedings;
- Best paper committee, Mirella Lapata (Chair), Kyunghyun Cho, Vera Demberg, Matt Gardner, Nizar Habash, Xuanjing Huang, Haizhou Li, Kathleen McKeown, Barbara Plank, Alexander Rush, for selecting the best papers and outstanding papers;
- The Ethics committee, chaired by Dirk Hovy and Karën Fort, and members: Emily Bender, Ryan Georgi, Alvin Grissom II, Margot Mieskes, Aurélie Névéol, and Amanda Stent, who graciously accepted our invitation towards the end of the review period and assessed papers with ethical concerns in a very tight schedule;
- Infrastructure chairs Eduardo Blanco, Jan-Christoph Klie, Yang Feng, Yansong Feng, Zhongyu Wei, Hao Fang, Sudha Rao who have made the virtual conference possible;
- Webmaster Andy Mckinlay for keeping the conference website updated;

- TACL editors-in-chief Mark Johnson, Ani Nenkova, and Brian Roark, TACL Editorial Assistant Cindy Robinson, and CL Editor-in-Chief Hwee Tou Ng for coordinating TACL and CL presentations with us;
- Jesse Dodge and Noah Smith for initiating the Reproducibility Checklist, helping the NLP community with more reproducible results;
- SIGDAT board members that have provided guidance regarding various decisions;
- Rich Gerber from Softconf who set up the EMNLP conference site, has always answered our questions in a timely manner, and helped us with different new requests such as handling Findings papers and sharing reviews between EMNLP and workshops;
- Priscilla Rasmussen for various discussions on organizing EMNLP;
- The entire EMNLP organizing committee who have worked together to make EMNLP a success.

We hope you will enjoy the virtual conference, and can participate in as many sessions as possible!

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Invited Speaker: Claire Cardie, Cornell University

Information Extraction Through the Years: How Did We Get Here?

Abstract: In this talk, I'll examine the state of the NLP subfield of information extraction from its inception almost 30 years ago to its current realization in neural network models. Which aspects of the original formulation of the task are more or less solved? In what ways are current state-of-the-art methods still falling short? What's up next for information extraction?

Bio: Claire Cardie is the John C. Ford Professor of Engineering in the Departments of Computer Science and Information Science at Cornell University. She has worked since the early 1990's on application of machine learning methods to problems in Natural Language Processing — on topics ranging from information extraction, noun phrase coreference resolution, text summarization and question answering to the automatic analysis of opinions, argumentation, and deception in text. She has served on the executive committees of the ACL and AAAI and twice as secretary of NAACL. She has been Program Chair for ACL/COLING, EMNLP and CoNLL, and General Chair for ACL in 2018. Cardie was named a Fellow of the ACL in 2015 and a Fellow of the Association for Computing Machinery (ACM) in 2019. At Cornell, she led the development of the university's academic programs in Information Science and was the founding Chair of its Information Science Department.

Invited Speaker: Rich Caruana, Microsoft

Friends Don't Let Friends Deploy Black-Box Models: The Importance of Intelligibility in Machine Learning

Abstract: In machine learning sometimes tradeoffs must be made between accuracy and intelligibility: the most accurate models usually are not very intelligible, and the most intelligible models usually are less accurate. This can limit the accuracy of models that can safely be deployed in mission-critical applications where being able to understand, validate, edit, and ultimately trust a model is important. We have been working on a learning method to escape this tradeoff that is as accurate as full complexity models such as boosted trees and random forests, but more intelligible than linear models. This makes it easy to understand what the model has learned and to edit the model when it learns inappropriate things. Making it possible for humans to understand and repair a model is critical because most training data has unexpected problems. I'll present several case studies where these high-accuracy GAMs discover surprising patterns in the data that would have made deploying a black-box model inappropriate. I'll also show how these models can be used to detect and correct bias. And if there's time, I'll briefly discuss using intelligible GAM models to predict COVID-19 mortality.

Bio: Rich Caruana is a Senior Principal Researcher at Microsoft. His focus is on intelligible/transparent modeling, machine learning for medical decision making, deep learning, and computational ecology. Before joining Microsoft, Rich was on the faculty in Computer Science at Cornell, at UCLA's Medical School, and at CMU's Center for Learning and Discovery. Rich's Ph.D. is from CMU. His work on Multitask Learning helped create interest in a subfield of machine learning called Transfer Learning. Rich received an NSF CAREER Award in 2004 (for Meta Clustering), best paper awards in 2005 (with Alex Niculescu-Mizil), 2007 (with Daria Sorokina), and 2014 (with Todd Kulesza, Saleema Amershi, Danyel Fisher, and Denis Charles), and co-chaired KDD in 2007 with Xindong Wu.

Invited Speaker: Janet B. Pierrehumbert, University of Oxford

Linguistic Behaviour and the Realistic Testing of NLP Systems

Abstract: To evaluate the performance of NLP systems, the standard is to use held-out test data. When the systems are deployed in real-world applications, they will only be successful if they perform well on examples that their architects never saw before. Many of these will be examples that nobody ever saw before; the central observation of generative linguistics, going back to Von Humboldt, is that human language involves “The infinite use of finite means”.

Predicting the real-world success of NLP systems thus comes down to predicting future human linguistic behaviour. In this talk, I will discuss some general characteristics of human linguistic behaviour, and the extent to which they are, or are not addressed in current NLP methodology. The topics I will address include: look-ahead and prediction; the role of categorization in building abstractions; effects of context; and variability across individuals.

Bio: Janet B. Pierrehumbert is the Professor of Language Modelling in the Department of Engineering Science at the University of Oxford. She received her BA in Linguistics and Mathematics at Harvard in 1975, and her Ph.D in Linguistics from MIT in 1980. Much of her Ph.D dissertation research on English prosody and intonation was carried out at AT&T Bell Laboratories, where she was also a Member of Technical Staff from 1982 to 1989. After she moved to Northwestern University in 1989, her research program used a wide variety of experimental and computational methods to explore how lexical systems emerge in speech communities. She showed that the mental representations of words are at once abstract and phonetically detailed, and that social factors interact with cognitive factors as lexical patterns are learned, remembered, and generalized. Pierrehumbert joined the faculty at the University of Oxford in 2015 as a member of the interdisciplinary Oxford e-Research Centre. Her current research uses machine-learning methods to model the dynamics of on-line language. Her latest project, funded by the UK EPSRC, seeks to develop new NLP methods to characterize exaggeration, cohesion, and fragmentation in on-line forums.

Pierrehumbert is a Fellow of the Linguistic Society of America, the Cognitive Science Society, and the American Academy of Arts and Sciences. She was elected to the National Academy of Sciences in 2019. She is the recipient of the 2020 Medal for Scientific Achievement from the International Speech Communication Association.

Table of Contents

<i>Detecting Attackable Sentences in Arguments</i>	
Yohan Jo, Seojin Bang, Emaad Manzoor, Eduard Hovy and Chris Reed	1
<i>Extracting Implicitly Asserted Propositions in Argumentation</i>	
Yohan Jo, Jacky Visser, Chris Reed and Eduard Hovy	24
<i>Quantitative Argument Summarization and Beyond: Cross-Domain Key Point Analysis</i>	
Roy Bar-Haim, Yoav Kantor, Lilach Eden, Roni Friedman, Dan Lahav and Noam Slonim	39
<i>Unsupervised Stance Detection for Arguments from Consequences</i>	
Jonathan Kobbe, Ioana Hulpuş and Heiner Stuckenschmidt	50
<i>BLEU might be Guilty but References are not Innocent</i>	
Markus Freitag, David Grangier and Isaac Caswell	61
<i>Statistical Power and Translationese in Machine Translation Evaluation</i>	
Yvette Graham, Barry Haddow and Philipp Koehn	72
<i>Simulated Multiple Reference Training Improves Low-Resource Machine Translation</i>	
Huda Khayrallah, Brian Thompson, Matt Post and Philipp Koehn	82
<i>Automatic Machine Translation Evaluation in Many Languages via Zero-Shot Paraphrasing</i>	
Brian Thompson and Matt Post	90
<i>PProver: Proof Generation for Interpretable Reasoning over Rules</i>	
Swarnadeep Saha, Sayan Ghosh, Shashank Srivastava and Mohit Bansal	122
<i>Learning to Explain: Datasets and Models for Identifying Valid Reasoning Chains in Multihop Question-Answering</i>	
Harsh Jhamtani and Peter Clark	137
<i>Self-Supervised Knowledge Triplet Learning for Zero-Shot Question Answering</i>	
Pratyay Banerjee and Chitta Baral	151
<i>More Bang for Your Buck: Natural Perturbation for Robust Question Answering</i>	
Daniel Khashabi, Tushar Khot and Ashish Sabharwal	163
<i>A Matter of Framing: The Impact of Linguistic Formalism on Probing Results</i>	
Iliia Kuznetsov and Iryna Gurevych	171
<i>Information-Theoretic Probing with Minimum Description Length</i>	
Elena Voita and Ivan Titov	183
<i>Intrinsic Probing through Dimension Selection</i>	
Lucas Torroba Hennigen, Adina Williams and Ryan Cotterell	197
<i>Learning Which Features Matter: RoBERTa Acquires a Preference for Linguistic Generalizations (Eventually)</i>	
Alex Warstadt, Yian Zhang, Xiaocheng Li, Haokun Liu and Samuel R. Bowman	217
<i>Repulsive Attention: Rethinking Multi-head Attention as Bayesian Inference</i>	
Bang An, Jie Lyu, Zhenyi Wang, Chunyuan Li, Changwei Hu, Fei Tan, Ruiyi Zhang, Yifan Hu and Changyou Chen	236

<i>KERMIT: Complementing Transformer Architectures with Encoders of Explicit Syntactic Interpretations</i> Fabio Massimo Zanzotto, Andrea Santilli, Leonardo Ranaldi, Dario Onorati, Pierfrancesco Tommasino and Francesca Fallucchi	256
<i>ETC: Encoding Long and Structured Inputs in Transformers</i> Joshua Ainslie, Santiago Ontanon, Chris Alberti, Vaclav Cvicek, Zachary Fisher, Philip Pham, Anirudh Ravula, Sumit Sanghai, Qifan Wang and Li Yang	268
<i>Pre-Training Transformers as Energy-Based Cloze Models</i> Kevin Clark, Minh-Thang Luong, Quoc Le and Christopher D. Manning	285
<i>Calibration of Pre-trained Transformers</i> Shrey Desai and Greg Durrett	295
<i>Near-imperceptible Neural Linguistic Steganography via Self-Adjusting Arithmetic Coding</i> Jiaming Shen, Heng Ji and Jiawei Han	303
<i>Multi-Dimensional Gender Bias Classification</i> Emily Dinan, Angela Fan, Ledell Wu, Jason Weston, Douwe Kiela and Adina Williams	314
<i>FIND: Human-in-the-Loop Debugging Deep Text Classifiers</i> Piyawat Lertvittayakumjorn, Lucia Specia and Francesca Toni	332
<i>Conversational Document Prediction to Assist Customer Care Agents</i> Jatin Ganhotra, Haggai Roitman, Doron Cohen, Nathaniel Mills, Chulaka Gunasekara, Yosi Mass, Sachindra Joshi, Luis Lastras and David Konopnicki	349
<i>Incremental Processing in the Age of Non-Incremental Encoders: An Empirical Assessment of Bidirectional Models for Incremental NLU</i> Brielen Madureira and David Schlangen	357
<i>Augmented Natural Language for Generative Sequence Labeling</i> Ben Athiwaratkun, Cicero Nogueira dos Santos, Jason Krone and Bing Xiang	375
<i>Dialogue Response Ranking Training with Large-Scale Human Feedback Data</i> Xiang Gao, Yizhe Zhang, Michel Galley, Chris Brockett and Bill Dolan	386
<i>Semantic Evaluation for Text-to-SQL with Distilled Test Suites</i> Ruiqi Zhong, Tao Yu and Dan Klein	396
<i>Cross-Thought for Sentence Encoder Pre-training</i> Shuohang Wang, Yuwei Fang, Siqi Sun, Zhe Gan, Yu Cheng, Jingjing Liu and Jing Jiang	412
<i>AutoQA: From Databases To QA Semantic Parsers With Only Synthetic Training Data</i> Silei Xu, Sina Semnani, Giovanni Campagna and Monica Lam	422
<i>A Spectral Method for Unsupervised Multi-Document Summarization</i> Kexiang Wang, Baobao Chang and Zhifang Sui	435
<i>What Have We Achieved on Text Summarization?</i> Dandan Huang, Leyang Cui, Sen Yang, Guangsheng Bao, Kun Wang, Jun Xie and Yue Zhang	446
<i>Q-learning with Language Model for Edit-based Unsupervised Summarization</i> Ryosuke Kohita, Akifumi Wachi, Yang Zhao and Ryuki Tachibana	470

<i>Friendly Topic Assistant for Transformer Based Abstractive Summarization</i>	
Zhengjue Wang, Zhibin Duan, Hao Zhang, chaojie wang, long tian, Bo Chen and Mingyuan Zhou	
	485
<i>Contrastive Distillation on Intermediate Representations for Language Model Compression</i>	
Siqi Sun, Zhe Gan, Yuwei Fang, Yu Cheng, Shuohang Wang and Jingjing Liu	498
<i>TernaryBERT: Distillation-aware Ultra-low Bit BERT</i>	
Wei Zhang, Lu Hou, Yichun Yin, Lifeng Shang, Xiao Chen, Xin Jiang and Qun Liu	509
<i>Self-Supervised Meta-Learning for Few-Shot Natural Language Classification Tasks</i>	
Trapit Bansal, Rishikesh Jha, Tsendsuren Munkhdalai and Andrew McCallum	522
<i>Efficient Meta Lifelong-Learning with Limited Memory</i>	
Zirui Wang, Sanket Vaibhav Mehta, Barnabas Poczos and Jaime Carbonell	535
<i>Don't Use English Dev: On the Zero-Shot Cross-Lingual Evaluation of Contextual Embeddings</i>	
Phillip Keung, Yichao Lu, Julian Salazar and Vikas Bhardwaj	549
<i>A Supervised Word Alignment Method based on Cross-Language Span Prediction using Multilingual BERT</i>	
Masaaki Nagata, Katsuki Chousa and Masaaki Nishino	555
<i>Accurate Word Alignment Induction from Neural Machine Translation</i>	
Yun Chen, Yang Liu, Guanhua Chen, Xin Jiang and Qun Liu	566
<i>ChrEn: Cherokee-English Machine Translation for Endangered Language Revitalization</i>	
Shiyue Zhang, Benjamin Frey and Mohit Bansal	577
<i>Unsupervised Discovery of Implicit Gender Bias</i>	
Anjalie Field and Yulia Tsvetkov	596
<i>Condolence and Empathy in Online Communities</i>	
Naitian Zhou and David Jurgens	609
<i>An Embedding Model for Estimating Legislative Preferences from the Frequency and Sentiment of Tweets</i>	
Gregory Spell, Brian Guay, Sunshine Hillygus and Lawrence Carin	627
<i>Measuring Information Propagation in Literary Social Networks</i>	
Matthew Sims and David Bamman	642
<i>Social Chemistry 101: Learning to Reason about Social and Moral Norms</i>	
Maxwell Forbes, Jena D. Hwang, Vered Shwartz, Maarten Sap and Yejin Choi	653
<i>Event Extraction by Answering (Almost) Natural Questions</i>	
Xinya Du and Claire Cardie	671
<i>Connecting the Dots: Event Graph Schema Induction with Path Language Modeling</i>	
Manling Li, Qi Zeng, Ying Lin, Kyunghyun Cho, Heng Ji, Jonathan May, Nathanael Chambers and Clare Voss	684
<i>Joint Constrained Learning for Event-Event Relation Extraction</i>	
Haoyu Wang, Muhao Chen, Hongming Zhang and Dan Roth	696
<i>Incremental Event Detection via Knowledge Consolidation Networks</i>	
Pengfei Cao, Yubo Chen, Jun Zhao and Taifeng Wang	707

<i>Semi-supervised New Event Type Induction and Event Detection</i> Lifu Huang and Heng Ji	718
<i>Language Generation with Multi-Hop Reasoning on Commonsense Knowledge Graph</i> Haozhe Ji, Pei Ke, Shaohan Huang, Furu Wei, Xiaoyan Zhu and Minlie Huang	725
<i>Reformulating Unsupervised Style Transfer as Paraphrase Generation</i> Kalpesh Krishna, John Wieting and Mohit Iyyer	737
<i>De-Biased Court’s View Generation with Causality</i> Yiquan Wu, Kun Kuang, Yating Zhang, Xiaozhong Liu, Changlong Sun, Jun Xiao, Yueting Zhuang, Luo Si and Fei Wu	763
<i>PAIR: Planning and Iterative Refinement in Pre-trained Transformers for Long Text Generation</i> Xinyu Hua and Lu Wang	781
<i>Back to the Future: Unsupervised Backprop-based Decoding for Counterfactual and Abductive Commonsense Reasoning</i> Lianhui Qin, Vered Shwartz, Peter West, Chandra Bhagavatula, Jena D. Hwang, Ronan Le Bras, Antoine Bosselut and Yejin Choi	794
<i>Where Are You? Localization from Embodied Dialog</i> Meera Hahn, Jacob Krantz, Dhruv Batra, Devi Parikh, James Rehg, Stefan Lee and Peter Anderson	806
<i>Learning to Represent Image and Text with Denotation Graph</i> Bowen Zhang, Hexiang Hu, Vihan Jain, Eugene Ie and Fei Sha	823
<i>Video2Commonsense: Generating Commonsense Descriptions to Enrich Video Captioning</i> Zhiyuan Fang, Tejas Gokhale, Pratyay Banerjee, Chitta Baral and Yezhou Yang	840
<i>Does my multimodal model learn cross-modal interactions? It’s harder to tell than you might think!</i> Jack Hessel and Lillian Lee	861
<i>MUTANT: A Training Paradigm for Out-of-Distribution Generalization in Visual Question Answering</i> Tejas Gokhale, Pratyay Banerjee, Chitta Baral and Yezhou Yang	878
<i>Mitigating Gender Bias for Neural Dialogue Generation with Adversarial Learning</i> Haochen Liu, Wentao Wang, Yiqi Wang, Hui Liu, Zitao Liu and Jiliang Tang	893
<i>Will I Sound Like Me? Improving Persona Consistency in Dialogues through Pragmatic Self-Consciousness</i> Hyunwoo Kim, Byeongchang Kim and Gunhee Kim	904
<i>TOD-BERT: Pre-trained Natural Language Understanding for Task-Oriented Dialogue</i> Chien-Sheng Wu, Steven C.H. Hoi, Richard Socher and Caiming Xiong	917
<i>RiSAWOZ: A Large-Scale Multi-Domain Wizard-of-Oz Dataset with Rich Semantic Annotations for Task-Oriented Dialogue Modeling</i> Jun Quan, Shian Zhang, Qian Cao, Zizhong Li and Deyi Xiong	930
<i>Filtering Noisy Dialogue Corpora by Connectivity and Content Relatedness</i> Reina Akama, Sho Yokoi, Jun Suzuki and Kentaro Inui	941
<i>Latent Geographical Factors for Analyzing the Evolution of Dialects in Contact</i> Yugo Murawaki	959

<i>Predicting Reference: What do Language Models Learn about Discourse Models?</i>	
Shiva Upadhye, Leon Bergen and Andrew Kehler	977
<i>Word class flexibility: A deep contextualized approach</i>	
Bai Li, Guillaume Thomas, Yang Xu and Frank Rudzicz	983
<i>Shallow-to-Deep Training for Neural Machine Translation</i>	
Bei Li, Ziyang Wang, Hui Liu, Yufan Jiang, Quan Du, Tong Xiao, Huizhen Wang and Jingbo Zhu	995
<i>Iterative Refinement in the Continuous Space for Non-Autoregressive Neural Machine Translation</i>	
Jason Lee, Raphael Shu and Kyunghyun Cho	1006
<i>Why Skip If You Can Combine: A Simple Knowledge Distillation Technique for Intermediate Layers</i>	
Yimeng Wu, Peyman Passban, Mehdi Rezagholizadeh and Qun Liu	1016
<i>Multi-task Learning for Multilingual Neural Machine Translation</i>	
Yiren Wang, ChengXiang Zhai and Hany Hassan	1022
<i>Token-level Adaptive Training for Neural Machine Translation</i>	
Shuhao Gu, Jinchao Zhang, Fandong Meng, Yang Feng, Wanying Xie, Jie Zhou and Dong Yu	1035
<i>Multi-Unit Transformers for Neural Machine Translation</i>	
Jianhao Yan, Fandong Meng and Jie Zhou	1047
<i>On the Sparsity of Neural Machine Translation Models</i>	
Yong Wang, Longyue Wang, Victor Li and Zhaopeng Tu	1060
<i>Incorporating a Local Translation Mechanism into Non-autoregressive Translation</i>	
Xiang Kong, Zhisong Zhang and Eduard Hovy	1067
<i>Self-Paced Learning for Neural Machine Translation</i>	
Yu Wan, Baosong Yang, Derek F. Wong, Yikai Zhou, Lidia S. Chao, Haibo Zhang and Boxing Chen	1074
<i>Long-Short Term Masking Transformer: A Simple but Effective Baseline for Document-level Neural Machine Translation</i>	
Pei Zhang, Boxing Chen, Niyu Ge and Kai Fan	1081
<i>Generating Diverse Translation from Model Distribution with Dropout</i>	
Xuanfu Wu, Yang Feng and Chenze Shao	1088
<i>Non-Autoregressive Machine Translation with Latent Alignments</i>	
Chitwan Saharia, William Chan, Saurabh Saxena and Mohammad Norouzi	1098
<i>Look at the First Sentence: Position Bias in Question Answering</i>	
Miyoung Ko, Jinhyuk Lee, Hyunjae Kim, Gangwoo Kim and Jaewoo Kang	1109
<i>ProtoQA: A Question Answering Dataset for Prototypical Common-Sense Reasoning</i>	
Michael Boratko, Xiang Li, Tim O’Gorman, Rajarshi Das, Dan Le and Andrew McCallum ..	1122
<i>IIRC: A Dataset of Incomplete Information Reading Comprehension Questions</i>	
James Ferguson, Matt Gardner, Hannaneh Hajishirzi, Tushar Khot and Pradeep Dasigi	1137
<i>Unsupervised Adaptation of Question Answering Systems via Generative Self-training</i>	
Steven Rennie, Etienne Marcheret, Neil Mallinar, David Nahamoo and Vaibhava Goel	1148

<i>TORQUE: A Reading Comprehension Dataset of Temporal Ordering Questions</i>	
Qiang Ning, Hao Wu, Rujun Han, Nanyun Peng, Matt Gardner and Dan Roth	1158
<i>ToTTo: A Controlled Table-To-Text Generation Dataset</i>	
Ankur Parikh, Xuezhi Wang, Sebastian Gehrmann, Manaal Faruqui, Bhuwan Dhingra, Diyi Yang and Dipanjan Das	1173
<i>ENT-DESC: Entity Description Generation by Exploring Knowledge Graph</i>	
Liyang Cheng, Dekun Wu, Lidong Bing, Yan Zhang, Zhanming Jie, Wei Lu and Luo Si	1187
<i>Small but Mighty: New Benchmarks for Split and Rephrase</i>	
Li Zhang, Huaiyu Zhu, Siddhartha Brahma and Yunyao Li	1198
<i>Online Back-Parsing for AMR-to-Text Generation</i>	
Xuefeng Bai, Linfeng Song and Yue Zhang	1206
<i>Reading Between the Lines: Exploring Infilling in Visual Narratives</i>	
Khyathi Raghavi Chandu, Ruo-Ping Dong and Alan W Black	1220
<i>Acrostic Poem Generation</i>	
Rajat Agarwal and Katharina Kann	1230
<i>Local Additivity Based Data Augmentation for Semi-supervised NER</i>	
Jiaao Chen, Zhenghui Wang, Ran Tian, Zichao Yang and Diyi Yang	1241
<i>Grounded Compositional Outputs for Adaptive Language Modeling</i>	
Nikolaos Pappas, Phoebe Mulcaire and Noah A. Smith	1252
<i>SSMBA: Self-Supervised Manifold Based Data Augmentation for Improving Out-of-Domain Robustness</i>	
Nathan Ng, Kyunghyun Cho and Marzyeh Ghassemi	1268
<i>SetConv: A New Approach for Learning from Imbalanced Data</i>	
Yang Gao, Yi-Fan Li, Yu Lin, Charu Aggarwal and Latifur Khan	1284
<i>Scalable Multi-Hop Relational Reasoning for Knowledge-Aware Question Answering</i>	
Yanlin Feng, Xinyue Chen, Bill Yuchen Lin, Peifeng Wang, Jun Yan and Xiang Ren	1295
<i>Improving Bilingual Lexicon Induction for Low Frequency Words</i>	
Jiaji Huang, Xingyu Cai and Kenneth Church	1310
<i>Learning VAE-LDA Models with Rounded Reparameterization Trick</i>	
Runzhi Tian, Yongyi Mao and Richong Zhang	1315
<i>Calibrated Language Model Fine-Tuning for In- and Out-of-Distribution Data</i>	
Lingkai Kong, Haoming Jiang, Yuchen Zhuang, Jie Lyu, Tuo Zhao and Chao Zhang	1326
<i>Scaling Hidden Markov Language Models</i>	
Justin Chiu and Alexander Rush	1341
<i>Coding Textual Inputs Boosts the Accuracy of Neural Networks</i>	
Abdul Rafae Khan, Jia Xu and Weiwei Sun	1350
<i>Learning from Task Descriptions</i>	
Orion Weller, Nicholas Lourie, Matt Gardner and Matthew Peters	1361

<i>Hashtags, Emotions, and Comments: A Large-Scale Dataset to Understand Fine-Grained Social Emotions to Online Topics</i>	
Keyang Ding, Jing Li and Yuji Zhang	1376
<i>Named Entity Recognition for Social Media Texts with Semantic Augmentation</i>	
Yuyang Nie, Yuanhe Tian, Xiang Wan, Yan Song and Bo Dai	1383
<i>Coupled Hierarchical Transformer for Stance-Aware Rumor Verification in Social Media Conversations</i>	
Jianfei Yu, Jing Jiang, Ling Min Serena Khoo, Hai Leong Chieu and Rui Xia	1392
<i>Social Media Attributions in the Context of Water Crisis</i>	
Rupak Sarkar, Sayantan Mahinder, Hirak Sarkar and Ashiqur KhudaBukhsh	1402
<i>On the Reliability and Validity of Detecting Approval of Political Actors in Tweets</i>	
Indira Sen, Fabian Flöck and Claudia Wagner	1413
<i>Towards Medical Machine Reading Comprehension with Structural Knowledge and Plain Text</i>	
Dongfang Li, Baotian Hu, Qingcai Chen, Weihua Peng and Anqi Wang	1427
<i>Generating Radiology Reports via Memory-driven Transformer</i>	
Zhihong Chen, Yan Song, Tsung-Hui Chang and Xiang Wan	1439
<i>Planning and Generating Natural and Diverse Disfluent Texts as Augmentation for Disfluency Detection</i>	
Jingfeng Yang, Diyi Yang and Zhaoran Ma	1450
<i>Predicting Clinical Trial Results by Implicit Evidence Integration</i>	
Qiao Jin, Chuanqi Tan, Moshua Chen, Xiaozhong Liu and Songfang Huang	1461
<i>Explainable Clinical Decision Support from Text</i>	
Jinyue Feng, Chantal Shaib and Frank Rudzicz	1478
<i>A Knowledge-driven Generative Model for Multi-implication Chinese Medical Procedure Entity Normalization</i>	
Jinghui Yan, Yining Wang, Lu Xiang, Yu Zhou and Chengqing Zong	1490
<i>Combining Automatic Labelers and Expert Annotations for Accurate Radiology Report Labeling Using BERT</i>	
Akshay Smit, Saahil Jain, Pranav Rajpurkar, Anuj Pareek, Andrew Ng and Matthew Lungren	1500
<i>Benchmarking Meaning Representations in Neural Semantic Parsing</i>	
Jiaqi Guo, Qian Liu, Jian-Guang LOU, Zhenwen Li, Xueqing Liu, Tao Xie and Ting Liu	1520
<i>Analogous Process Structure Induction for Sub-event Sequence Prediction</i>	
Hongming Zhang, Muhao Chen, Haoyu Wang, Yangqiu Song and Dan Roth	1541
<i>SLM: Learning a Discourse Language Representation with Sentence Unshuffling</i>	
Haejun Lee, Drew A. Hudson, Kangwook Lee and Christopher D. Manning	1551
<i>Detecting Fine-Grained Cross-Lingual Semantic Divergences without Supervision by Learning to Rank</i>	
Eleftheria Briakou and Marine Carpuat	1563
<i>A Bilingual Generative Transformer for Semantic Sentence Embedding</i>	
John Wieting, Graham Neubig and Taylor Berg-Kirkpatrick	1581
<i>Semantically Inspired AMR Alignment for the Portuguese Language</i>	
Rafael Anchiêta and Thiago Pardo	1595

<i>An Unsupervised Sentence Embedding Method by Mutual Information Maximization</i> Yan Zhang, Ruidan He, ZUOZHU LIU, Kwan Hui Lim and Lidong Bing	1601
<i>Compositional Phrase Alignment and Beyond</i> Yuki Arase and Jun'ichi Tsujii	1611
<i>Table Fact Verification with Structure-Aware Transformer</i> Hongzhi Zhang, Yingyao Wang, Sirui Wang, Xuezhi Cao, Fuzheng Zhang and Zhongyuan Wang 1624	
<i>Double Graph Based Reasoning for Document-level Relation Extraction</i> Shuang Zeng, Runxin Xu, Baobao Chang and Lei Li	1630
<i>Event Extraction as Machine Reading Comprehension</i> Jian Liu, Yubo Chen, Kang Liu, Wei Bi and Xiaojiang Liu	1641
<i>MAVEN: A Massive General Domain Event Detection Dataset</i> Xiaozhi Wang, Ziqi Wang, Xu Han, Wangyi Jiang, Rong Han, Zhiyuan Liu, Juanzi Li, Peng Li, Yankai Lin and Jie Zhou	1652
<i>Knowledge Graph Alignment with Entity-Pair Embedding</i> Zhichun Wang, Jinjian Yang and Xiaoju Ye	1672
<i>Adaptive Attentional Network for Few-Shot Knowledge Graph Completion</i> Jiawei Sheng, Shu Guo, Zhenyu Chen, Juwei Yue, Lihong Wang, Tingwen Liu and Hongbo Xu 1681	
<i>Pre-training Entity Relation Encoder with Intra-span and Inter-span Information</i> Yijun Wang, Changzhi Sun, Yuanbin Wu, Junchi Yan, Peng Gao and Guotong Xie	1692
<i>Two are Better than One: Joint Entity and Relation Extraction with Table-Sequence Encoders</i> Jue WANG and Wei Lu	1706
<i>Beyond [CLS] through Ranking by Generation</i> Cicero Nogueira dos Santos, Xiaofei Ma, Ramesh Nallapati, zhiheng huang and Bing Xiang .	1722
<i>Tired of Topic Models? Clusters of Pretrained Word Embeddings Make for Fast and Good Topics too!</i> Suzanna Sia, Ayush Dalmia and Sabrina J. Mielke	1728
<i>Multi-document Summarization with Maximal Marginal Relevance-guided Reinforcement Learning</i> Yuning Mao, Yanru Qu, Yiqing Xie, Xiang Ren and Jiawei Han	1737
<i>Improving Neural Topic Models using Knowledge Distillation</i> Alexander Miserlis Hoyle, Pranav Goel and Philip Resnik	1752
<i>Short Text Topic Modeling with Topic Distribution Quantization and Negative Sampling Decoder</i> Xiaobao Wu, Chunping Li, Yan Zhu and Yishu Miao	1772
<i>Querying Across Genres for Medical Claims in News</i> Chaoyuan Zuo, Narayan Acharya and Ritwik Banerjee	1783
<i>Incorporating Multimodal Information in Open-Domain Web Keyphrase Extraction</i> Yansen Wang, Zhen Fan and Carolyn Rose	1790

<i>CMU-MOSEAS: A Multimodal Language Dataset for Spanish, Portuguese, German and French</i> AmirAli Bagher Zadeh, Yansheng Cao, Simon Hessner, Paul Pu Liang, Soujanya Poria and Louis-Philippe Morency	1801
<i>Combining Self-Training and Self-Supervised Learning for Unsupervised Disfluency Detection</i> Shaolei Wang, Zhongyuan Wang, Wanxiang Che and Ting Liu	1813
<i>Multimodal Routing: Improving Local and Global Interpretability of Multimodal Language Analysis</i> Yao-Hung Hubert Tsai, Martin Ma, Muqiao Yang, Ruslan Salakhutdinov and Louis-Philippe Morency	1823
<i>Multistage Fusion with Forget Gate for Multimodal Summarization in Open-Domain Videos</i> Nayu Liu, Xian Sun, Hongfeng Yu, Wenkai Zhang and Guangluan Xu	1834
<i>BiST: Bi-directional Spatio-Temporal Reasoning for Video-Grounded Dialogues</i> Hung Le, Doyen Sahoo, Nancy Chen and Steven C.H. Hoi	1846
<i>UniConv: A Unified Conversational Neural Architecture for Multi-domain Task-oriented Dialogues</i> Hung Le, Doyen Sahoo, Chenghao Liu, Nancy Chen and Steven C.H. Hoi	1860
<i>GraphDialog: Integrating Graph Knowledge into End-to-End Task-Oriented Dialogue Systems</i> Shiquan Yang, Rui Zhang and Sarah Erfani	1878
<i>Structured Attention for Unsupervised Dialogue Structure Induction</i> Liang Qiu, Yizhou Zhao, Weiyan Shi, Yuan Liang, Feng Shi, Tao Yuan, Zhou Yu and Song-Chun Zhu	1889
<i>Cross Copy Network for Dialogue Generation</i> Changzhen Ji, Xin Zhou, Yating Zhang, Xiaozhong Liu, Changlong Sun, Conghui Zhu and Tiejun Zhao	1900
<i>Multi-turn Response Selection using Dialogue Dependency Relations</i> Qi Jia, Yizhu Liu, Siyu Ren, Kenny Zhu and Haifeng Tang	1911
<i>Parallel Interactive Networks for Multi-Domain Dialogue State Generation</i> Junfan Chen, Richong Zhang, Yongyi Mao and Jie Xu	1921
<i>SlotRefine: A Fast Non-Autoregressive Model for Joint Intent Detection and Slot Filling</i> Di Wu, Liang Ding, Fan Lu and Jian Xie	1932
<i>An Information Bottleneck Approach for Controlling Conciseness in Rationale Extraction</i> Bhargavi Paranjape, Mandar Joshi, John Thickstun, Hannaneh Hajishirzi and Luke Zettlemoyer	1938
<i>CrowS-Pairs: A Challenge Dataset for Measuring Social Biases in Masked Language Models</i> Nikita Nangia, Clara Vania, Rasika Bhalerao and Samuel R. Bowman	1953
<i>LOGAN: Local Group Bias Detection by Clustering</i> Jieyu Zhao and Kai-Wei Chang	1968
<i>RNNs can generate bounded hierarchical languages with optimal memory</i> John Hewitt, Michael Hahn, Surya Ganguli, Percy Liang and Christopher D. Manning	1978
<i>Detecting Independent Pronoun Bias with Partially-Synthetic Data Generation</i> Robert Munro and Alex (Carmen) Morrison	2011

<i>Visually Grounded Continual Learning of Compositional Phrases</i> Xisen Jin, Junyi Du, Arka Sadhu, Ram Nevatia and Xiang Ren	2018
<i>MAF: Multimodal Alignment Framework for Weakly-Supervised Phrase Grounding</i> Qinxin Wang, Hao Tan, Sheng Shen, Michael Mahoney and Zhewei Yao	2030
<i>Domain-Specific Lexical Grounding in Noisy Visual-Textual Documents</i> Gregory Yauney, Jack Hessel and David Mimno	2039
<i>HERO: Hierarchical Encoder for Video+Language Omni-representation Pre-training</i> Linjie Li, Yen-Chun Chen, Yu Cheng, Zhe Gan, Licheng Yu and Jingjing Liu	2046
<i>Vokenization: Improving Language Understanding with Contextualized, Visual-Grounded Supervision</i> Hao Tan and Mohit Bansal	2066
<i>Detecting Cross-Modal Inconsistency to Defend Against Neural Fake News</i> Reuben Tan, Bryan Plummer and Kate Saenko	2081
<i>Enhancing Aspect Term Extraction with Soft Prototypes</i> Zhuang Chen and Tiejun Qian	2107
<i>FedED: Federated Learning via Ensemble Distillation for Medical Relation Extraction</i> Dianbo Sui, Yubo Chen, Jun Zhao, Yantao Jia, Yuantao Xie and Weijian Sun	2118
<i>Multimodal Joint Attribute Prediction and Value Extraction for E-commerce Product</i> Tiangang Zhu, Yue Wang, Haoran Li, Youzheng Wu, Xiaodong He and Bowen Zhou	2129
<i>A Predicate-Function-Argument Annotation of Natural Language for Open-Domain Information eXpression</i> Mingming Sun, Wenyue Hua, Zoey Liu, Xin Wang, Kangjie Zheng and Ping Li	2140
<i>Retrofitting Structure-aware Transformer Language Model for End Tasks</i> Hao Fei, Yafeng Ren and Donghong Ji	2151
<i>Lightweight, Dynamic Graph Convolutional Networks for AMR-to-Text Generation</i> Yan Zhang, Zhijiang Guo, Zhiyang Teng, Wei Lu, Shay B. Cohen, ZUOZHU LIU and Lidong Bing	2162
<i>If beam search is the answer, what was the question?</i> Clara Meister, Ryan Cotterell and Tim Vieira	2173
<i>Understanding the Mechanics of SPIGOT: Surrogate Gradients for Latent Structure Learning</i> Tsvetomila Mihaylova, Vlad Niculae and André F. T. Martins	2186
<i>Is the Best Better? Bayesian Statistical Model Comparison for Natural Language Processing</i> Piotr Szymański and Kyle Gorman	2203
<i>Exploring Logically Dependent Multi-task Learning with Causal Inference</i> Wenqing Chen, Jidong Tian, Liqiang Xiao, Hao He and Yaohui Jin	2213
<i>Masking as an Efficient Alternative to Finetuning for Pretrained Language Models</i> Mengjie Zhao, Tao Lin, Fei Mi, Martin Jaggi and Hinrich Schütze	2226
<i>Dynamic Context Selection for Document-level Neural Machine Translation via Reinforcement Learning</i> Xiaomian Kang, Yang Zhao, Jiajun Zhang and Chengqing Zong	2242

<i>Data Rejuvenation: Exploiting Inactive Training Examples for Neural Machine Translation</i> Wenxiang Jiao, Xing Wang, Shilin He, Irwin King, Michael Lyu and Zhaopeng Tu	2255
<i>Pronoun-Targeted Fine-tuning for NMT with Hybrid Losses</i> Prathyusha Jwalapuram, Shafiq Joty and Youlin Shen	2267
<i>Learning Adaptive Segmentation Policy for Simultaneous Translation</i> Ruiqing Zhang, Chuanqiang Zhang, Zhongjun He, Hua Wu and Haifeng Wang	2280
<i>Learn to Cross-lingual Transfer with Meta Graph Learning Across Heterogeneous Languages</i> Zheng Li, Mukul Kumar, William Headden, Bing Yin, Ying Wei, Yu Zhang and Qiang Yang ..	2290
<i>UDapter: Language Adaptation for Truly Universal Dependency Parsing</i> Ahmet Üstün, Arianna Bisazza, Gosse Bouma and Gertjan van Noord	2302
<i>Uncertainty-Aware Label Refinement for Sequence Labeling</i> Tao Gui, Jiacheng Ye, Qi Zhang, Zhengyan Li, Zichu Fei, Yeyun Gong and Xuanjing Huang ..	2316
<i>Adversarial Attack and Defense of Structured Prediction Models</i> Wenjuan Han, Liwen Zhang, Yong Jiang and Kewei Tu	2327
<i>Position-Aware Tagging for Aspect Sentiment Triplet Extraction</i> Lu Xu, Hao Li, Wei Lu and Lidong Bing	2339
<i>Simultaneous Machine Translation with Visual Context</i> Ozan Caglayan, Julia Ive, Veneta Haralampieva, Pranava Madhyastha, Loïc Barrault and Lucia Specia	2350
<i>XCOPA: A Multilingual Dataset for Causal Commonsense Reasoning</i> Edoardo Maria Ponti, Goran Glavaš, Olga Majewska, Qianchu Liu, Ivan Vulić and Anna Korhonen	2362
<i>The Secret is in the Spectra: Predicting Cross-lingual Task Performance with Spectral Similarity Measures</i> Haim Dubossarsky, Ivan Vulić, Roi Reichart and Anna Korhonen	2377
<i>Bridging Linguistic Typology and Multilingual Machine Translation with Multi-View Language Representations</i> Arturo Oncevay, Barry Haddow and Alexandra Birch	2391
<i>AnswerFact: Fact Checking in Product Question Answering</i> Wenxuan Zhang, Yang Deng, Jing Ma and Wai Lam	2407
<i>Context-Aware Answer Extraction in Question Answering</i> Yeon Seonwoo, Ji-Hoon Kim, Jung-Woo Ha and Alice Oh	2418
<i>What do Models Learn from Question Answering Datasets?</i> Priyanka Sen and Amir Saffari	2429
<i>Discern: Discourse-Aware Entailment Reasoning Network for Conversational Machine Reading</i> Yifan Gao, Chien-Sheng Wu, Jingjing Li, Shafiq Joty, Steven C.H. Hoi, Caiming Xiong, Irwin King and Michael Lyu	2439
<i>A Method for Building a Commonsense Inference Dataset based on Basic Events</i> Kazumasa Omura, Daisuke Kawahara and Sadao Kurohashi	2450

<i>Neural Deepfake Detection with Factual Structure of Text</i> Wanjun Zhong, Duyu Tang, Zenan Xu, Ruize Wang, Nan Duan, Ming Zhou, Jiahai Wang and Jian Yin	2461
<i>MultiCQA: Zero-Shot Transfer of Self-Supervised Text Matching Models on a Massive Scale</i> Andreas Rücklé, Jonas Pfeiffer and Iryna Gurevych	2471
<i>XL-AMR: Enabling Cross-Lingual AMR Parsing with Transfer Learning Techniques</i> Rexhina Blloshmi, Rocco Tripodi and Roberto Navigli	2487
<i>Improving AMR Parsing with Sequence-to-Sequence Pre-training</i> Dongqin Xu, Junhui Li, Muhua Zhu, Min Zhang and Guodong Zhou	2501
<i>Hate-Speech and Offensive Language Detection in Roman Urdu</i> Hammad Rizwan, Muhammad Haroon Shakeel and Asim Karim	2512
<i>Suicidal Risk Detection for Military Personnel</i> Sungjoon Park, Kiwoong Park, Jaimeen Ahn and Alice Oh	2523
<i>Comparative Evaluation of Label-Agnostic Selection Bias in Multilingual Hate Speech Datasets</i> Nedjma Ousidhoum, Yangqiu Song and Dit-Yan Yeung	2532
<i>HENIN: Learning Heterogeneous Neural Interaction Networks for Explainable Cyberbullying Detection on Social Media</i> Hsin-Yu Chen and Cheng-Te Li	2543
<i>Reactive Supervision: A New Method for Collecting Sarcasm Data</i> Boaz Shmueli, Lun-Wei Ku and Soumya Ray	2553
<i>Self-Induced Curriculum Learning in Self-Supervised Neural Machine Translation</i> Dana Ruitter, Josef van Genabith and Cristina España-Bonet	2560
<i>Towards Reasonably-Sized Character-Level Transformer NMT by Finetuning Subword Systems</i> Jindřich Libovický and Alexander Fraser	2572
<i>Transfer Learning and Distant Supervision for Multilingual Transformer Models: A Study on African Languages</i> Michael A. Hedderich, David Adelani, Dawei Zhu, Jesujoba Alabi, Udia Markus and Dietrich Klakow	2580
<i>Translation Quality Estimation by Jointly Learning to Score and Rank</i> Jingyi Zhang and Josef van Genabith	2592
<i>Direct Segmentation Models for Streaming Speech Translation</i> Javier Iranzo-Sánchez, Adrià Giménez Pastor, Joan Albert Silvestre-Cerdà, Pau Baquero-Arnal, Jorge Civera Saiz and Alfons Juan	2599
<i>Not Low-Resource Anymore: Aligner Ensembling, Batch Filtering, and New Datasets for Bengali-English Machine Translation</i> Tahmid Hasan, Abhik Bhattacharjee, Kazi Samin, Masum Hasan, Madhusudan Basak, M. Sohel Rahman and Rifat Shahriyar	2612
<i>CSP: Code-Switching Pre-training for Neural Machine Translation</i> Zhen Yang, Bojie Hu, ambyera han, shen huang and Qi Ju	2624

<i>Type B Reflexivization as an Unambiguous Testbed for Multilingual Multi-Task Gender Bias</i> Ana Valeria González, Maria Barrett, Rasmus Hvingelby, Kellie Webster and Anders Søgaard	2637
<i>Pre-training Multilingual Neural Machine Translation by Leveraging Alignment Information</i> Zehui Lin, Xiao Pan, Mingxuan Wang, Xipeng Qiu, Jiangtao Feng, Hao Zhou and Lei Li	2649
<i>Losing Heads in the Lottery: Pruning Transformer Attention in Neural Machine Translation</i> Maximiliana Behnke and Kenneth Heafield	2664
<i>Towards Enhancing Faithfulness for Neural Machine Translation</i> Rongxiang Weng, Heng Yu, Xiangpeng Wei and Weihua Luo	2675
<i>COMET: A Neural Framework for MT Evaluation</i> Ricardo Rei, Craig Stewart, Ana C Farinha and Alon Lavie	2685
<i>Reusing a Pretrained Language Model on Languages with Limited Corpora for Unsupervised NMT</i> Alexandra Chronopoulou, Dario Stojanovski and Alexander Fraser	2703
<i>LNMap: Departures from Isomorphic Assumption in Bilingual Lexicon Induction Through Non-Linear Mapping in Latent Space</i> Tasnim Mohiuddin, M Saiful Bari and Shafiq Joty	2712
<i>Uncertainty-Aware Semantic Augmentation for Neural Machine Translation</i> Xiangpeng Wei, Heng Yu, Yue Hu, Rongxiang Weng, Luxi Xing and Weihua Luo	2724
<i>Can Automatic Post-Editing Improve NMT?</i> Shamil Chollampatt, Raymond Hendy Susanto, Liling Tan and Ewa Szymanska	2736
<i>Parsing Gapping Constructions Based on Grammatical and Semantic Roles</i> Yoshihide Kato and Shigeki Matsubara	2747
<i>Span-based discontinuous constituency parsing: a family of exact chart-based algorithms with time complexities from $O(n^6)$ down to $O(n^3)$</i> Cao Corro	2753
<i>Some Languages Seem Easier to Parse Because Their Treebanks Leak</i> Anders Søgaard	2765
<i>Discontinuous Constituent Parsing as Sequence Labeling</i> David Vilares and Carlos Gómez-Rodríguez	2771
<i>Modularized Syntactic Neural Networks for Sentence Classification</i> Haiyan Wu, Ying Liu and Shaoyun Shi	2786
<i>TED-CDB: A Large-Scale Chinese Discourse Relation Dataset on TED Talks</i> Wanqiu Long, Bonnie Webber and Deyi Xiong	2793
<i>QADiscourse - Discourse Relations as QA Pairs: Representation, Crowdsourcing and Baselines</i> Valentina Pyatkin, Ayal Klein, Reut Tsarfaty and Ido Dagan	2804
<i>Discourse Self-Attention for Discourse Element Identification in Argumentative Student Essays</i> Wei Song, Ziyao Song, Ruiji Fu, Lizhen Liu, Miaomiao Cheng and Ting Liu	2820

<i>MEGATRON-CNTRL: Controllable Story Generation with External Knowledge Using Large-Scale Language Models</i>	
Peng Xu, Mostofa Patwary, Mohammad Shoeybi, Raul Puri, Pascale Fung, Anima Anandkumar and Bryan Catanzaro	2831
<i>Incomplete Utterance Rewriting as Semantic Segmentation</i>	
Qian Liu, Bei Chen, Jian-Guang LOU, Bin Zhou and Dongmei Zhang	2846
<i>Improving Grammatical Error Correction Models with Purpose-Built Adversarial Examples</i>	
Lihao Wang and Xiaoqing Zheng	2858
<i>Homophonic Pun Generation with Lexically Constrained Rewriting</i>	
Zhiwei Yu, Hongyu Zang and Xiaojun Wan	2870
<i>How to Make Neural Natural Language Generation as Reliable as Templates in Task-Oriented Dialogue</i>	
Henry Elder, Alexander O’Connor and Jennifer Foster	2877
<i>Multilingual AMR-to-Text Generation</i>	
Angela Fan and Claire Gardent	2889
<i>Exploring the Linear Subspace Hypothesis in Gender Bias Mitigation</i>	
Francisco Vargas and Ryan Cotterell	2902
<i>Lifelong Language Knowledge Distillation</i>	
Yung-Sung Chuang, Shang-Yu Su and Yun-Nung Chen	2914
<i>Sparse Parallel Training of Hierarchical Dirichlet Process Topic Models</i>	
Alexander Terenin, Måns Magnusson and Leif Jonsson	2925
<i>Multi-label Few/Zero-shot Learning with Knowledge Aggregated from Multiple Label Graphs</i>	
Jueqing Lu, Lan Du, Ming Liu and Joanna Dipnall	2935
<i>Word Rotator’s Distance</i>	
Sho Yokoi, Ryo Takahashi, Reina Akama, Jun Suzuki and Kentaro Inui	2944
<i>Disentangle-based Continual Graph Representation Learning</i>	
Xiaoyu Kou, Yankai Lin, Shaobo Liu, Peng Li, Jie Zhou and Yan Zhang	2961
<i>Semi-Supervised Bilingual Lexicon Induction with Two-way Interaction</i>	
Xu Zhao, Zihao Wang, Hao Wu and Yong Zhang	2973
<i>Wasserstein Distance Regularized Sequence Representation for Text Matching in Asymmetrical Domains</i>	
Weijie Yu, Chen Xu, Jun Xu, Liang Pang, Xiaopeng Gao, Xiaozhao Wang and Ji-Rong Wen ..	2985
<i>A Simple Approach to Learning Unsupervised Multilingual Embeddings</i>	
Pratik Jawanpuria, Mayank Meghwanshi and Bamdev Mishra	2995
<i>Bootstrapped Q-learning with Context Relevant Observation Pruning to Generalize in Text-based Games</i>	
Subhajit Chaudhury, Daiki Kimura, Kartik Talamadupula, Michiaki Tatsubori, Asim Munawar and Ryuki Tachibana	3002
<i>BERT-EMD: Many-to-Many Layer Mapping for BERT Compression with Earth Mover’s Distance</i>	
jianquan li, Xiaokang Liu, Honghong Zhao, Ruifeng Xu, Min Yang and yaohong jin	3009
<i>Slot Attention with Value Normalization for Multi-Domain Dialogue State Tracking</i>	
Yexiang Wang, Yi Guo and Siqi Zhu	3019

<i>Don't Read Too Much Into It: Adaptive Computation for Open-Domain Question Answering</i> Yuxiang Wu, Sebastian Riedel, Pasquale Minervini and Pontus Stenetorp	3029
<i>Multi-Step Inference for Reasoning Over Paragraphs</i> Jiangming Liu, Matt Gardner, Shay B. Cohen and Mirella Lapata	3040
<i>Learning a Cost-Effective Annotation Policy for Question Answering</i> Bernhard Kratzwald, Stefan Feuerriegel and Huan Sun	3051
<i>Scene Restoring for Narrative Machine Reading Comprehension</i> Zhixing Tian, Yuanzhe Zhang, Kang Liu, Jun Zhao, Yantao Jia and Zhicheng Sheng	3063
<i>A Simple and Effective Model for Answering Multi-span Questions</i> Elad Segal, Avia Efrat, Mor Shoham, Amir Globerson and Jonathan Berant	3074
<i>Top-Rank-Focused Adaptive Vote Collection for the Evaluation of Domain-Specific Semantic Models</i> Pierangelo Lombardo, Alessio Boiardi, Luca Colombo, Angelo Schiavone and Nicolò Tamagnone	3081
<i>Meta Fine-Tuning Neural Language Models for Multi-Domain Text Mining</i> Chengyu Wang, Minghui Qiu, Jun Huang and XIAOFENG HE	3094
<i>Incorporating Behavioral Hypotheses for Query Generation</i> Ruey-Cheng Chen and Chia-Jung Lee	3105
<i>Conditional Causal Relationships between Emotions and Causes in Texts</i> Xinhong Chen, Qing Li and Jianping Wang	3111
<i>COMETA: A Corpus for Medical Entity Linking in the Social Media</i> Marco Basaldella, Fangyu Liu, Ehsan Shareghi and Nigel Collier	3122
<i>Pareto Probing: Trading Off Accuracy for Complexity</i> Tiago Pimentel, Naomi Saphra, Adina Williams and Ryan Cotterell	3138
<i>Interpretation of NLP models through input marginalization</i> Siwon Kim, Jihun Yi, Eunji Kim and Sungroh Yoon	3154
<i>Generating Label Cohesive and Well-Formed Adversarial Claims</i> Pepa Atanasova, Dustin Wright and Isabelle Augenstein	3168
<i>Are All Good Word Vector Spaces Isomorphic?</i> Ivan Vulić, Sebastian Ruder and Anders Søgaard	3178
<i>Cold-Start and Interpretability: Turning Regular Expressions into Trainable Recurrent Neural Networks</i> Chengyue Jiang, Yinggong Zhao, Shanbo Chu, Libin Shen and Kewei Tu	3193
<i>When BERT Plays the Lottery, All Tickets Are Winning</i> Sai Prasanna, Anna Rogers and Anna Rumshisky	3208
<i>On the weak link between importance and prunability of attention heads</i> Aakriti Budhraja, Madhura Pande, Preksha Nema, Pratyush Kumar and Mitesh M. Khapra ...	3230
<i>Towards Interpreting BERT for Reading Comprehension Based QA</i> Sahana Ramnath, Preksha Nema, Deep Sahni and Mitesh M. Khapra	3236

<i>How do Decisions Emerge across Layers in Neural Models? Interpretation with Differentiable Masking</i> Nicola De Cao, Michael Sejr Schlichtkrull, Wilker Aziz and Ivan Titov	3243
<i>A Diagnostic Study of Explainability Techniques for Text Classification</i> Pepa Atanasova, Jakob Grue Simonsen, Christina Lioma and Isabelle Augenstein	3256
<i>STL-CQA: Structure-based Transformers with Localization and Encoding for Chart Question Answering</i> Hrituraj Singh and Sumit Shekhar	3275
<i>Learning to Contrast the Counterfactual Samples for Robust Visual Question Answering</i> Zujie Liang, Weitao Jiang, Haifeng Hu and Jiaying Zhu	3285
<i>Learning Physical Common Sense as Knowledge Graph Completion via BERT Data Augmentation and Constrained Tucker Factorization</i> Zhenjie Zhao, Evangelos Papalexakis and Xiaojuan Ma	3293
<i>A Visually-grounded First-person Dialogue Dataset with Verbal and Non-verbal Responses</i> Hisashi Kamezawa, Noriki Nishida, Nobuyuki Shimizu, Takashi Miyazaki and Hideki Nakayama	3299
<i>Cross-Media Keyphrase Prediction: A Unified Framework with Multi-Modality Multi-Head Attention and Image Wordings</i> Yue Wang, Jing Li, Michael Lyu and Irwin King	3311
<i>VD-BERT: A Unified Vision and Dialog Transformer with BERT</i> Yue Wang, Shafiq Joty, Michael Lyu, Irwin King, Caiming Xiong and Steven C.H. Hoi	3325
<i>The Grammar of Emergent Languages</i> Oskar van der Wal, Silvan de Boer, Elia Bruni and Dieuwke Hupkes	3339
<i>Sub-Instruction Aware Vision-and-Language Navigation</i> Yicong Hong, Cristian Rodriguez, Qi Wu and Stephen Gould	3360
<i>Knowledge-Grounded Dialogue Generation with Pre-trained Language Models</i> Xueliang Zhao, wei wu, Can Xu, Chongyang Tao, Dongyan Zhao and Rui Yan	3377
<i>MinTL: Minimalist Transfer Learning for Task-Oriented Dialogue Systems</i> Zhaojiang Lin, Andrea Madotto, Genta Indra Winata and Pascale Fung	3391
<i>Variational Hierarchical Dialog Autoencoder for Dialog State Tracking Data Augmentation</i> Kang Min Yoo, Hanbit Lee, Franck Dernoncourt, Trung Bui, Walter Chang and Sang-goo Lee	3406
<i>Bridging the Gap between Prior and Posterior Knowledge Selection for Knowledge-Grounded Dialogue Generation</i> Xiuyi Chen, Fandong Meng, Peng Li, Feilong Chen, Shuang Xu, Bo Xu and Jie Zhou	3426
<i>Counterfactual Off-Policy Training for Neural Dialogue Generation</i> Qingfu Zhu, Wei-Nan Zhang, Ting Liu and William Yang Wang	3438
<i>Dialogue Distillation: Open-Domain Dialogue Augmentation Using Unpaired Data</i> Rongsheng Zhang, Yinhe Zheng, Jianzhi Shao, Xiaoxi Mao, Yadong Xi and Minlie Huang ..	3449
<i>Task-Completion Dialogue Policy Learning via Monte Carlo Tree Search with Dueling Network</i> Sihan Wang, kaijie zhou, Kunfeng Lai and Jianping Shen	3461

<i>Learning a Simple and Effective Model for Multi-turn Response Generation with Auxiliary Tasks</i> YUFAN ZHAO, Can Xu and wei wu	3472
<i>AttnIO: Knowledge Graph Exploration with In-and-Out Attention Flow for Knowledge-Grounded Dialogue</i> Jaehun Jung, Bokyung Son and Sungwon Lyu	3484
<i>Amalgamating Knowledge from Two Teachers for Task-oriented Dialogue System with Adversarial Training</i> Wanwei He, Min Yang, Rui Yan, Chengming Li, Ying Shen and Ruifeng Xu	3498
<i>Task-oriented Domain-specific Meta-Embedding for Text Classification</i> Xin Wu, Yi Cai, Yang Kai, Tao Wang and Qing Li	3508
<i>Don't Neglect the Obvious: On the Role of Unambiguous Words in Word Sense Disambiguation</i> Daniel Loureiro and Jose Camacho-Collados	3514
<i>Within-Between Lexical Relation Classification</i> Oren Barkan, Avi Caciularu and Ido Dagan	3521
<i>With More Contexts Comes Better Performance: Contextualized Sense Embeddings for All-Round Word Sense Disambiguation</i> Bianca Scarlini, Tommaso Pasini and Roberto Navigli	3528
<i>Convolution over Hierarchical Syntactic and Lexical Graphs for Aspect Level Sentiment Analysis</i> Mi Zhang and Tiejun Qian	3540
<i>Multi-Instance Multi-Label Learning Networks for Aspect-Category Sentiment Analysis</i> Yuncong Li, Cunxiang Yin, Sheng-hua Zhong and Xu Pan	3550
<i>Aspect Sentiment Classification with Aspect-Specific Opinion Spans</i> Lu Xu, Lidong Bing, Wei Lu and Fei Huang	3561
<i>Emotion-Cause Pair Extraction as Sequence Labeling Based on A Novel Tagging Scheme</i> Chaofa Yuan, Chuang Fan, Jianzhu Bao and Ruifeng Xu	3568
<i>End-to-End Emotion-Cause Pair Extraction based on Sliding Window Multi-Label Learning</i> Zixiang Ding, Rui Xia and Jianfei Yu	3574
<i>Multi-modal Multi-label Emotion Detection with Modality and Label Dependence</i> Dong Zhang, Xincheng Ju, Junhui Li, Shoushan Li, Qiaoming Zhu and Guodong Zhou	3584
<i>Tasty Burgers, Soggy Fries: Probing Aspect Robustness in Aspect-Based Sentiment Analysis</i> Xiaoyu Xing, Zhijing Jin, Di Jin, Bingning Wang, Qi Zhang and Xuanjing Huang	3594
<i>Modeling Content Importance for Summarization with Pre-trained Language Models</i> Liqiang Xiao, Lu Wang, Hao He and Yaohui Jin	3606
<i>Unsupervised Reference-Free Summary Quality Evaluation via Contrastive Learning</i> Hanlu Wu, Tengfei Ma, Lingfei Wu, Tariro Manyumwa and Shouling Ji	3612
<i>Neural Extractive Summarization with Hierarchical Attentive Heterogeneous Graph Network</i> Ruipeng Jia, Yanan Cao, Hengzhu Tang, Fang Fang, Cong Cao and Shi Wang	3622
<i>Coarse-to-Fine Query Focused Multi-Document Summarization</i> Yumo Xu and Mirella Lapata	3632

<i>Pre-training for Abstractive Document Summarization by Reinstating Source Text</i> Yanyan Zou, Xingxing Zhang, Wei Lu, Furu Wei and Ming Zhou	3646
<i>Learning from Context or Names? An Empirical Study on Neural Relation Extraction</i> Hao Peng, Tianyu Gao, Xu Han, Yankai Lin, Peng Li, Zhiyuan Liu, Maosong Sun and Jie Zhou	3661
<i>SelfORE: Self-supervised Relational Feature Learning for Open Relation Extraction</i> Xuming Hu, Lijie Wen, Yusong Xu, Chenwei Zhang and Philip Yu	3673
<i>Denoising Relation Extraction from Document-level Distant Supervision</i> Chaojun Xiao, Yuan Yao, Ruobing Xie, Xu Han, Zhiyuan Liu, Maosong Sun, Fen Lin and Leyu Lin	3683
<i>Let's Stop Incorrect Comparisons in End-to-end Relation Extraction!</i> Bruno Taillé, Vincent Guigue, Geoffrey Scoutheeten and patrick Gallinari	3689
<i>Exposing Shallow Heuristics of Relation Extraction Models with Challenge Data</i> Shachar Rosenman, Alon Jacovi and Yoav Goldberg	3702
<i>Global-to-Local Neural Networks for Document-Level Relation Extraction</i> Difeng Wang, Wei Hu, Ermei Cao and Weijian Sun	3711
<i>Recurrent Interaction Network for Jointly Extracting Entities and Classifying Relations</i> Kai Sun, Richong Zhang, Samuel Mensah, Yongyi Mao and xudong Liu	3722
<i>Temporal Knowledge Base Completion: New Algorithms and Evaluation Protocols</i> Prachi Jain, Sushant Rathi, and Soumen Chakrabarti	3733
<i>OpenIE6: Iterative Grid Labeling and Coordination Analysis for Open Information Extraction</i> Keshav Kolluru, Vaibhav Adlakha, Samarth Aggarwal, and Soumen Chakrabarti	3748
<i>Public Sentiment Drift Analysis Based on Hierarchical Variational Auto-encoder</i> Wenyue Zhang, Xiaoli Li, Yang Li, Suge Wang, Deyu Li, Jian Liao and Jianxing Zheng	3762
<i>Point to the Expression: Solving Algebraic Word Problems using the Expression-Pointer Transformer Model</i> Bugeun Kim, Kyung Seo Ki, Donggeon Lee and Gahgene Gweon	3768
<i>Semantically-Aligned Universal Tree-Structured Solver for Math Word Problems</i> Jinghui Qin, Lihui Lin, Xiaodan Liang, Rumin Zhang and Liang Lin	3780
<i>Neural Topic Modeling by Incorporating Document Relationship Graph</i> Deyu Zhou, Xueming Hu and Rui Wang	3790
<i>Routing Enforced Generative Model for Recipe Generation</i> Zhiwei Yu, Hongyu Zang and Xiaojun Wan	3797
<i>Assessing the Helpfulness of Learning Materials with Inference-Based Learner-Like Agent</i> Yun-Hsuan Jen, Chieh-Yang Huang, MeiHua Chen, Ting-Hao Huang and Lun-Wei Ku	3807
<i>Selection and Generation: Learning towards Multi-Product Advertisement Post Generation</i> Zhangming Chan, Yuchi Zhang, Xiuying Chen, Shen Gao, Zhiqiang Zhang, Dongyan Zhao and Rui Yan	3818

<i>Form2Seq : A Framework for Higher-Order Form Structure Extraction</i>	
Milan Aggarwal, Hires Gupta, Mausoom Sarkar and Balaji Krishnamurthy	3830
<i>Domain Adaptation of Thai Word Segmentation Models using Stacked Ensemble</i>	
Peerat Limkonchotiwat, Wannaphong Phatthiyaphaibun, Raheem Sarwar, Ekapol Chuangsuwanich and Sarana Nutanong	3841
<i>DagoBERT: Generating Derivational Morphology with a Pretrained Language Model</i>	
Valentin Hofmann, Janet Pierrehumbert and Hinrich Schütze	3848
<i>Attention Is All You Need for Chinese Word Segmentation</i>	
Sufeng Duan and Hai Zhao	3862
<i>A Joint Multiple Criteria Model in Transfer Learning for Cross-domain Chinese Word Segmentation</i>	
Kaiyu Huang, Degen Huang, Zhuang Liu and Fengran Mo	3873
<i>Alignment-free Cross-lingual Semantic Role Labeling</i>	
Rui Cai and Mirella Lapata	3883
<i>Leveraging Declarative Knowledge in Text and First-Order Logic for Fine-Grained Propaganda Detection</i>	
Ruize Wang, Duyu Tang, Nan Duan, Wanjun Zhong, Zhongyu Wei, Xuanjing Huang, Daxin Jiang and Ming Zhou	3895
<i>X-SRL: A Parallel Cross-Lingual Semantic Role Labeling Dataset</i>	
Angel Daza and Anette Frank	3904
<i>Graph Convolutions over Constituent Trees for Syntax-Aware Semantic Role Labeling</i>	
Diego Marcheggiani and Ivan Titov	3915
<i>Fast semantic parsing with well-typedness guarantees</i>	
Matthias Lindemann, Jonas Groschwitz and Alexander Koller	3929
<i>Improving Out-of-Scope Detection in Intent Classification by Using Embeddings of the Word Graph Space of the Classes</i>	
Paulo Cavalin, Victor Henrique Alves Ribeiro, Ana Appel and Claudio Pinhanez	3952
<i>Supervised Seeded Iterated Learning for Interactive Language Learning</i>	
Yuchen Lu, Soumye Singhal, Florian Strub, Olivier Pietquin and Aaron Courville	3962
<i>Spot The Bot: A Robust and Efficient Framework for the Evaluation of Conversational Dialogue Systems</i>	
Jan Deriu, Don Tuggener, Pius von Däniken, Jon Ander Campos, Alvaro Rodrigo, Thiziri Belkacem, Aitor Soroa, Eneko Agirre and Mark Cieliebak	3971
<i>Human-centric dialog training via offline reinforcement learning</i>	
Natasha Jaques, Judy Hanwen Shen, Asma Ghandeharioun, Craig Ferguson, Agata Lapedriza, Noah Jones, Shixiang Gu and Rosalind Picard	3985
<i>Speakers Fill Lexical Semantic Gaps with Context</i>	
Tiago Pimentel, Rowan Hall Maudslay, Damian Blasi and Ryan Cotterell	4004
<i>Investigating Cross-Linguistic Adjective Ordering Tendencies with a Latent-Variable Model</i>	
Jun Yen Leung, Guy Emerson and Ryan Cotterell	4016
<i>Surprisal Predicts Code-Switching in Chinese-English Bilingual Text</i>	
Jesús Calvillo, Le Fang, Jeremy Cole and David Reitter	4029

<i>Word Frequency Does Not Predict Grammatical Knowledge in Language Models</i> Charles Yu, Ryan Sie, Nicolas Tedeschi and Leon Bergen	4040
<i>Improving Word Sense Disambiguation with Translations</i> Yixing Luan, Bradley Hauer, Lili Mou and Grzegorz Kondrak	4055
<i>Towards Better Context-aware Lexical Semantics: Adjusting Contextualized Representations through Static Anchors</i> Qianchu Liu, Diana McCarthy and Anna Korhonen	4066
<i>Compositional Demographic Word Embeddings</i> Charles Welch, Jonathan K. Kummerfeld, Verónica Pérez-Rosas and Rada Mihalcea	4076
<i>Do “Undocumented Workers” == “Illegal Aliens”? Differentiating Denotation and Connotation in Vector Spaces</i> Albert Webson, Zhizhong Chen, Carsten Eickhoff and Ellie Pavlick	4090
<i>Multi-View Sequence-to-Sequence Models with Conversational Structure for Abstractive Dialogue Summarization</i> Jiaao Chen and Diyi Yang	4106
<i>Few-Shot Learning for Opinion Summarization</i> Arthur Bražinskas, Mirella Lapata and Ivan Titov	4119
<i>Learning to Fuse Sentences with Transformers for Summarization</i> Logan Lebanoff, Franck Dernoncourt, Doo Soon Kim, Lidan Wang, Walter Chang and Fei Liu	4136
<i>Stepwise Extractive Summarization and Planning with Structured Transformers</i> Shashi Narayan, Joshua Maynez, Jakub Adamek, Daniele Pighin, Blaz Bratanić and Ryan McDonald	4143
<i>CLIRMatrix: A massively large collection of bilingual and multilingual datasets for Cross-Lingual Information Retrieval</i> Shuo Sun and Kevin Duh	4160
<i>SLEDGE-Z: A Zero-Shot Baseline for COVID-19 Literature Search</i> Sean MacAvaney, Arman Cohan and Nazli Goharian	4171
<i>Modularized Transformer-based Ranking Framework</i> Luyu Gao, Zhuyun Dai and Jamie Callan	4180
<i>Ad-hoc Document Retrieval using Weak-Supervision with BERT and GPT2</i> Yosi Mass and Haggai Roitman	4191
<i>Adversarial Semantic Collisions</i> Congzheng Song, Alexander Rush and Vitaly Shmatikov	4198
<i>Learning Explainable Linguistic Expressions with Neural Inductive Logic Programming for Sentence Classification</i> Prithviraj Sen, Marina Danilevsky, Yunyao Li, Siddhartha Brahma, Matthias Boehm, Laura Chiticariu and Rajasekar Krishnamurthy	4211
<i>AutoPrompt: Eliciting Knowledge from Language Models with Automatically Generated Prompts</i> Taylor Shin, Yasaman Razeghi, Robert L Logan IV, Eric Wallace and Sameer Singh	4222

<i>Learning Variational Word Masks to Improve the Interpretability of Neural Text Classifiers</i>	
Hanjie Chen and Yangfeng Ji	4236
<i>Sparse Text Generation</i>	
Pedro Henrique Martins, Zita Marinho and André F. T. Martins	4252
<i>PlotMachines: Outline-Conditioned Generation with Dynamic Plot State Tracking</i>	
Hannah Rashkin, Asli Celikyilmaz, Yejin Choi and Jianfeng Gao	4274
<i>Do sequence-to-sequence VAEs learn global features of sentences?</i>	
Tom Bosc and Pascal Vincent	4296
<i>Content Planning for Neural Story Generation with Aristotelian Rescoring</i>	
Seraphina Goldfarb-Tarrant, Tuhin Chakrabarty, Ralph Weischedel and Nanyun Peng	4319
<i>Generating Dialogue Responses from a Semantic Latent Space</i>	
Wei-Jen Ko, Avik Ray, Yilin Shen and Hongxia Jin	4339
<i>Refer, Reuse, Reduce: Generating Subsequent References in Visual and Conversational Contexts</i>	
Ece Takmaz, Mario Giulianelli, Sandro Pezzelle, Arabella Sinclair and Raquel Fernández ...	4350
<i>Visually Grounded Compound PCFGs</i>	
Yanpeng Zhao and Ivan Titov	4369
<i>ALICE: Active Learning with Contrastive Natural Language Explanations</i>	
Weixin Liang, James Zou and Zhou Yu	4380
<i>Room-Across-Room: Multilingual Vision-and-Language Navigation with Dense Spatiotemporal Grounding</i>	
Alexander Ku, Peter Anderson, Roma Patel, Eugene Ie and Jason Baldrige	4392
<i>SSCR: Iterative Language-Based Image Editing via Self-Supervised Counterfactual Reasoning</i>	
Tsu-Jui Fu, Xin Wang, Scott Grafton, Miguel Eckstein and William Yang Wang	4413
<i>Identifying Elements Essential for BERT's Multilinguality</i>	
Philipp Dufter and Hinrich Schütze	4423
<i>On Negative Interference in Multilingual Models: Findings and A Meta-Learning Treatment</i>	
Zirui Wang, Zachary C. Lipton and Yulia Tsvetkov	4438
<i>Pre-tokenization of Multi-word Expressions in Cross-lingual Word Embeddings</i>	
Naoki Otani, Satoru Ozaki, Xingyuan Zhao, Yucen Li, Micael St Johns and Lori Levin ...	4451
<i>Monolingual Adapters for Zero-Shot Neural Machine Translation</i>	
Jerin Philip, Alexandre Berard, Matthias Gallé and Laurent Besacier	4465
<i>Do Explicit Alignments Robustly Improve Multilingual Encoders?</i>	
Shijie Wu and Mark Dredze	4471
<i>From Zero to Hero: On the Limitations of Zero-Shot Language Transfer with Multilingual Transformers</i>	
Anne Lauscher, Vinit Ravishankar, Ivan Vulić and Goran Glavaš	4483
<i>Distilling Multiple Domains for Neural Machine Translation</i>	
Anna Currey, Prashant Mathur and Georgiana Dinu	4500

<i>Making Monolingual Sentence Embeddings Multilingual using Knowledge Distillation</i>	
Nils Reimers and Iryna Gurevych	4512
<i>A Streaming Approach For Efficient Batched Beam Search</i>	
Kevin Yang, Violet Yao, John DeNero and Dan Klein	4526
<i>Improving Multilingual Models with Language-Clustered Vocabularies</i>	
Hyung Won Chung, Dan Garrette, Kiat Chuan Tan and Jason Riesa	4536
<i>Zero-Shot Cross-Lingual Transfer with Meta Learning</i>	
Farhad Nooralahzadeh, Giannis Bekoulis, Johannes Bjerva and Isabelle Augenstein	4547
<i>The Multilingual Amazon Reviews Corpus</i>	
Phillip Keung, Yichao Lu, György Szarvas and Noah A. Smith	4563
<i>GLUCOSE: Generalized and Contextualized Story Explanations</i>	
Nasrin Mostafazadeh, Aditya Kalyanpur, Lori Moon, David Buchanan, Lauren Berkowitz, Or Biran and Jennifer Chu-Carroll	4569
<i>Character-level Representations Improve DRS-based Semantic Parsing Even in the Age of BERT</i>	
Rik van Noord, Antonio Toral and Johan Bos	4587
<i>Infusing Disease Knowledge into BERT for Health Question Answering, Medical Inference and Disease Name Recognition</i>	
Yun He, Ziwei Zhu, Yin Zhang, Qin Chen and James Caverlee	4604
<i>Unsupervised Commonsense Question Answering with Self-Talk</i>	
Vered Shwartz, Peter West, Ronan Le Bras, Chandra Bhagavatula and Yejin Choi	4615
<i>Reasoning about Goals, Steps, and Temporal Ordering with WikiHow</i>	
Li Zhang, Qing Lyu and Chris Callison-Burch	4630
<i>Structural Supervision Improves Few-Shot Learning and Syntactic Generalization in Neural Language Models</i>	
Ethan Wilcox, Peng Qian, Richard Futrell, Ryosuke Kohita, Roger Levy and Miguel Ballesteros	4640
<i>Investigating representations of verb bias in neural language models</i>	
Robert Hawkins, Takateru Yamakoshi, Thomas Griffiths and Adele Goldberg	4653
<i>Generating Image Descriptions via Sequential Cross-Modal Alignment Guided by Human Gaze</i>	
Ece Takmaz, Sandro Pezzelle, Lisa Beinborn and Raquel Fernández	4664
<i>Optimus: Organizing Sentences via Pre-trained Modeling of a Latent Space</i>	
Chunyuan Li, Xiang Gao, Yuan Li, Baolin Peng, Xiujun Li, Yizhe Zhang and Jianfeng Gao ..	4678
<i>BioMegatron: Larger Biomedical Domain Language Model</i>	
Hoo-Chang Shin, Yang Zhang, Evelina Bakhturina, Raul Puri, Mostofa Patwary, Mohammad Shoeybi and Raghav Mani	4700
<i>Text Segmentation by Cross Segment Attention</i>	
Michal Lukasik, Boris Dadachev, Kishore Papineni and Goncalo Simoes	4707
<i>RussianSuperGLUE: A Russian Language Understanding Evaluation Benchmark</i>	
Tatiana Shavrina, Alena Fenogenova, Emelyanov Anton, Denis Shevelev, Ekaterina Artemova, Valentin Malykh, Vladislav Mikhailov, Maria Tikhonova, Andrey Chertok and Andrey Evlampiev	4717

<i>An Empirical Study of Pre-trained Transformers for Arabic Information Extraction</i>	
Wuwei Lan, Yang Chen, Wei Xu and Alan Ritter	4727
<i>TNT: Text Normalization based Pre-training of Transformers for Content Moderation</i>	
Fei Tan, Yifan Hu, Changwei Hu, Keqian Li and Kevin Yen	4735
<i>Methods for Numeracy-Preserving Word Embeddings</i>	
Dhanasekar Sundararaman, Shijing Si, Vivek Subramanian, Guoyin Wang, Devamanyu Hazarika and Lawrence Carin	4742
<i>An Empirical Investigation of Contextualized Number Prediction</i>	
Taylor Berg-Kirkpatrick and Daniel Spokoyny	4754
<i>Modeling the Music Genre Perception across Language-Bound Cultures</i>	
Elena V. Epure, Guillaume Salha, Manuel Moussallam and Romain Hennequin	4765
<i>Joint Estimation and Analysis of Risk Behavior Ratings in Movie Scripts</i>	
Victor Martinez, Krishna Somandepalli, Yalda Tehrani-Uhls and Shrikanth Narayanan	4780
<i>Keep it Surprisingly Simple: A Simple First Order Graph Based Parsing Model for Joint Morphosyntactic Parsing in Sanskrit</i>	
Amrith Krishna, Ashim Gupta, Deepak Garasangi, Pavankumar Satuluri and Pawan Goyal ...	4791
<i>Unsupervised Parsing via Constituency Tests</i>	
Steven Cao, Nikita Kitaev and Dan Klein	4798
<i>Please Mind the Root: Decoding Arborescences for Dependency Parsing</i>	
Ran Zmigrod, Tim Vieira and Ryan Cotterell	4809
<i>Unsupervised Cross-Lingual Part-of-Speech Tagging for Truly Low-Resource Scenarios</i>	
Ramy Eskander, Smaranda Muresan and Michael Collins	4820
<i>Unsupervised Parsing with S-DIORA: Single Tree Encoding for Deep Inside-Outside Recursive Autoencoders</i>	
Andrew Drozdov, Subendhu Rongali, Yi-Pei Chen, Tim O’Gorman, Mohit Iyyer and Andrew McCallum	4832
<i>Utility is in the Eye of the User: A Critique of NLP Leaderboards</i>	
Kawin Ethayarajh and Dan Jurafsky	4846
<i>An Empirical Investigation Towards Efficient Multi-Domain Language Model Pre-training</i>	
Kristjan Arumae, Qing Sun and Parminder Bhatia	4854
<i>Analyzing Individual Neurons in Pre-trained Language Models</i>	
Nadir Durrani, Hassan Sajjad, Fahim Dalvi and Yonatan Belinkov	4865
<i>Dissecting Span Identification Tasks with Performance Prediction</i>	
Sean Papay, Roman Klinger and Sebastian Padó	4881
<i>Assessing Phrasal Representation and Composition in Transformers</i>	
Lang Yu and Allyson Ettinger	4896
<i>Analyzing Redundancy in Pretrained Transformer Models</i>	
Fahim Dalvi, Hassan Sajjad, Nadir Durrani and Yonatan Belinkov	4908

<i>Be More with Less: Hypergraph Attention Networks for Inductive Text Classification</i>	
Kaize Ding, Jianling Wang, Jundong Li, Dingcheng Li and Huan Liu	4927
<i>Entities as Experts: Sparse Memory Access with Entity Supervision</i>	
Thibault Févry, Livio Baldini Soares, Nicholas FitzGerald, Eunsol Choi and Tom Kwiatkowski	4937
<i>H2KGAT: Hierarchical Hyperbolic Knowledge Graph Attention Network</i>	
Shen Wang, Xiaokai Wei, Cicero Nogueira dos Santos, Zhiguo Wang, Ramesh Nallapati, Andrew Arnold, Bing Xiang and Philip S. Yu	4952
<i>Does the Objective Matter? Comparing Training Objectives for Pronoun Resolution</i>	
Yordan Yordanov, Oana-Maria Camburu, Vid Kocijan and Thomas Lukasiewicz	4963
<i>On Losses for Modern Language Models</i>	
Stéphane Aroca-Ouellette and Frank Rudzicz	4970
<i>We Can Detect Your Bias: Predicting the Political Ideology of News Articles</i>	
Ramy Baly, Giovanni Da San Martino, James Glass and Preslav Nakov	4982
<i>Semantic Label Smoothing for Sequence to Sequence Problems</i>	
Michal Lukasik, Himanshu Jain, Aditya Menon, Seungyeon Kim, Srinadh Bhojanapalli, Felix Yu and Sanjiv Kumar	4992
<i>Training for Gibbs Sampling on Conditional Random Fields with Neural Scoring Factors</i>	
Sida Gao and Matthew R. Gormley	4999
<i>Multilevel Text Alignment with Cross-Document Attention</i>	
Xuhui Zhou, Nikolaos Pappas and Noah A. Smith	5012
<i>Conversational Semantic Parsing</i>	
Armen Aghajanyan, Jean Maillard, Akshat Shrivastava, Keith Diedrick, Michael Haeger, Haoran Li, Yashar Mehdad, Veselin Stoyanov, Anuj Kumar, Mike Lewis and Sonal Gupta	5026
<i>Probing Task-Oriented Dialogue Representation from Language Models</i>	
Chien-Sheng Wu and Caiming Xiong	5036
<i>End-to-End Slot Alignment and Recognition for Cross-Lingual NLU</i>	
Weijia Xu, Batool Haider and Saab Mansour	5052
<i>Discriminative Nearest Neighbor Few-Shot Intent Detection by Transferring Natural Language Inference</i>	
Jianguo Zhang, Kazuma Hashimoto, Wenhao Liu, Chien-Sheng Wu, Yao Wan, Philip Yu, Richard Socher and Caiming Xiong	5064
<i>Simple Data Augmentation with the Mask Token Improves Domain Adaptation for Dialog Act Tagging</i>	
Semih Yavuz, Kazuma Hashimoto, Wenhao Liu, Nitish Shirish Keskar, Richard Socher and Caiming Xiong	5083
<i>Low-Resource Domain Adaptation for Compositional Task-Oriented Semantic Parsing</i>	
Xilun Chen, Asish Ghoshal, Yashar Mehdad, Luke Zettlemoyer and Sonal Gupta	5090
<i>Sound Natural: Content Rephrasing in Dialog Systems</i>	
Arash Einolghozati, Anchit Gupta, Keith Diedrick and Sonal Gupta	5101
<i>Zero-Shot Crosslingual Sentence Simplification</i>	
Jonathan Mallinson, Rico Sennrich and Mirella Lapata	5109

<i>Facilitating the Communication of Politeness through Fine-Grained Paraphrasing</i> Liye Fu, Susan Fussell and Cristian Danescu-Niculescu-Mizil	5127
<i>CAT-Gen: Improving Robustness in NLP Models via Controlled Adversarial Text Generation</i> Tianlu Wang, Xuezhi Wang, Yao Qin, Ben Packer, Kang Li, Jilin Chen, Alex Beutel and Ed Chi	5141
<i>Seq2Edits: Sequence Transduction Using Span-level Edit Operations</i> Felix Stahlberg and Shankar Kumar	5147
<i>Controllable Meaning Representation to Text Generation: Linearization and Data Augmentation Strategies</i> Chris Kedzie and Kathleen McKeown	5160
<i>Blank Language Models</i> Tianxiao Shen, Victor Quach, Regina Barzilay and Tommi Jaakkola	5186
<i>COD3S: Diverse Generation with Discrete Semantic Signatures</i> Nathaniel Weir, João Sedoc and Benjamin Van Durme	5199
<i>Automatic Extraction of Rules Governing Morphological Agreement</i> Aditi Chaudhary, Antonios Anastasopoulos, Adithya Pratapa, David R. Mortensen, Zaid Sheikh, Yulia Tsvetkov and Graham Neubig	5212
<i>Tackling the Low-resource Challenge for Canonical Segmentation</i> Manuel Mager, Özlem Çetinoğlu and Katharina Kann	5237
<i>IGT2P: From Interlinear Glossed Texts to Paradigms</i> Sarah Moeller, Ling Liu, Changbing Yang, Katharina Kann and Mans Hulden	5251
<i>A Computational Approach to Understanding Empathy Expressed in Text-Based Mental Health Support</i> Ashish Sharma, Adam Miner, David Atkins and Tim Althoff	5263
<i>Modeling Protagonist Emotions for Emotion-Aware Storytelling</i> Faeze Brahman and Snigdha Chaturvedi	5277
<i>Help! Need Advice on Identifying Advice</i> Venkata Subrahmanyam Govindarajan, Benjamin Chen, Rebecca Warholc, Katrin Erk and Junyi Jessy Li	5295
<i>Quantifying Intimacy in Language</i> Jiaxin Pei and David Jurgens	5307
<i>Writing Strategies for Science Communication: Data and Computational Analysis</i> Tal August, Lauren Kim, Katharina Reinecke and Noah A. Smith	5327
<i>Weakly Supervised Subevent Knowledge Acquisition</i> Wenlin Yao, Zeyu Dai, Maitreyi Ramaswamy, Bonan Min and Ruihong Huang	5345
<i>Biomedical Event Extraction as Sequence Labeling</i> Alan Ramponi, Rob van der Goot, Rosario Lombardo and Barbara Plank	5357
<i>Annotating Temporal Dependency Graphs via Crowdsourcing</i> Jiarui Yao, Haoling Qiu, Bonan Min and Nianwen Xue	5368

<i>Introducing a New Dataset for Event Detection in Cybersecurity Texts</i>	
Hieu Man Duc Trong, Duc Trong Le, Amir Pouran Ben Veyseh, Thuat Nguyen and Thien Huu Nguyen	5381
<i>CHARM: Inferring Personal Attributes from Conversations</i>	
Anna Tiginova, Andrew Yates, Paramita Mirza and Gerhard Weikum	5391
<i>Event Detection: Gate Diversity and Syntactic Importance Scores for Graph Convolution Neural Networks</i>	
Viet Dac Lai, Tuan Ngo Nguyen and Thien Huu Nguyen	5405
<i>Severing the Edge Between Before and After: Neural Architectures for Temporal Ordering of Events</i>	
Miguel Ballesteros, Rishita Anubhai, Shuai Wang, Nima Pourdamghani, Yogarshi Vyas, Jie Ma, Parminder Bhatia, Kathleen McKeown and Yaser Al-Onaizan	5412
<i>How Much Knowledge Can You Pack Into the Parameters of a Language Model?</i>	
Adam Roberts, Colin Raffel and Noam Shazeer	5418
<i>EXAMS: A Multi-subject High School Examinations Dataset for Cross-lingual and Multilingual Question Answering</i>	
Momchil Hardalov, Todor Mihaylov, Dimitrina Zlatkova, Yoan Dinkov, Ivan Koychev and Preslav Nakov	5427
<i>End-to-End Synthetic Data Generation for Domain Adaptation of Question Answering Systems</i>	
Siamak Shakeri, Cicero Nogueira dos Santos, Henghui Zhu, Patrick Ng, Feng Nan, Zhiguo Wang, Ramesh Nallapati and Bing Xiang	5445
<i>Multi-Stage Pre-training for Low-Resource Domain Adaptation</i>	
Rong Zhang, Revanth Gangi Reddy, Md Arafat Sultan, Vittorio Castelli, Anthony Ferritto, Radu Florian, Efsun Sarioglu Kayi, Salim Roukos, Avi Sil and Todd Ward	5461
<i>ISAAQ - Mastering Textbook Questions with Pre-trained Transformers and Bottom-Up and Top-Down Attention</i>	
Jose Manuel Gomez-Perez and Raúl Ortega	5469
<i>SubjQA: A Dataset for Subjectivity and Review Comprehension</i>	
Johannes Bjerva, Nikita Bhutani, Behzad Golshan, Wang-Chiew Tan and Isabelle Augenstein	5480
<i>Widget Captioning: Generating Natural Language Description for Mobile User Interface Elements</i>	
Yang Li, Gang Li, Luheng He, Jingjie Zheng, Hong Li and Zhiwei Guan	5495
<i>Unsupervised Natural Language Inference via Decoupled Multimodal Contrastive Learning</i>	
Wanyun Cui, Guangyu Zheng and Wei Wang	5511
<i>Digital Voicing of Silent Speech</i>	
David Gaddy and Dan Klein	5521
<i>Imitation Attacks and Defenses for Black-box Machine Translation Systems</i>	
Eric Wallace, Mitchell Stern and Dawn Song	5531
<i>Sequence-Level Mixed Sample Data Augmentation</i>	
Demi Guo, Yoon Kim and Alexander Rush	5547
<i>Consistency of a Recurrent Language Model With Respect to Incomplete Decoding</i>	
Sean Welleck, Ilia Kulikov, Jaedeok Kim, Richard Yuanzhe Pang and Kyunghyun Cho	5553

<i>An Exploration of Arbitrary-Order Sequence Labeling via Energy-Based Inference Networks</i> Lifu Tu, Tianyu Liu and Kevin Gimpel	5669
<i>Ensemble Distillation for Structured Prediction: Calibrated, Accurate, Fast—Choose Three</i> Steven Reich, David Mueller and Nicholas Andrews	5683
<i>Inducing Target-Specific Latent Structures for Aspect Sentiment Classification</i> Chenhua Chen, Zhiyang Teng and Yue Zhang	5696
<i>Affective Event Classification with Discourse-enhanced Self-training</i> Yuan Zhuang, Tianyu Jiang and Ellen Riloff	5608
<i>Deep Weighted MaxSAT for Aspect-based Opinion Extraction</i> Meixi Wu, Wenya Wang and Sinno Jialin Pan	5618
<i>Multi-view Story Characterization from Movie Plot Synopses and Reviews</i> Sudipta Kar, Gustavo Aguilar, Mirella Lapata and Tamar Solorio	5629
<i>Mind Your Inflections! Improving NLP for Non-Standard Englishes with Base-Inflection Encoding</i> Samson Tan, Shafiq Joty, Lav Varshney and Min-Yen Kan	5647
<i>Measuring the Similarity of Grammatical Gender Systems by Comparing Partitions</i> Arya D. McCarthy, Adina Williams, Shijia Liu, David Yarowsky and Ryan Cotterell	5664
<i>RethinkCWS: Is Chinese Word Segmentation a Solved Task?</i> Jinlan Fu, Pengfei Liu, Qi Zhang and Xuanjing Huang	5676
<i>Learning to Pronounce Chinese Without a Pronunciation Dictionary</i> Christopher Chu, Scot Fang and Kevin Knight	5687
<i>Dynamic Anticipation and Completion for Multi-Hop Reasoning over Sparse Knowledge Graph</i> Xin Lv, Xu Han, Lei Hou, Juanzi Li, Zhiyuan Liu, Wei Zhang, YICHI ZHANG, Hao Kong and Suhui Wu	5694
<i>Knowledge Association with Hyperbolic Knowledge Graph Embeddings</i> Zequn Sun, Muhao Chen, Wei Hu, Chengming Wang, Jian Dai and Wei Zhang	5704
<i>Domain Knowledge Empowered Structured Neural Net for End-to-End Event Temporal Relation Extraction</i> Rujun Han, Yichao Zhou and Nanyun Peng	5717
<i>TeMP: Temporal Message Passing for Temporal Knowledge Graph Completion</i> Jiapeng Wu, Meng Cao, Jackie Chi Kit Cheung and William L. Hamilton	5730
<i>Understanding the Difficulty of Training Transformers</i> Liyuan Liu, Xiaodong Liu, Jianfeng Gao, Weizhu Chen and Jiawei Han	5747
<i>An Empirical Study of Generation Order for Machine Translation</i> William Chan, Mitchell Stern, Jamie Kiros and Jakob Uszkoreit	5764
<i>Inference Strategies for Machine Translation with Conditional Masking</i> Julia Kreutzer, George Foster and Colin Cherry	5774
<i>AmbigQA: Answering Ambiguous Open-domain Questions</i> Sewon Min, Julian Michael, Hannaneh Hajishirzi and Luke Zettlemoyer	5783

<i>Tell Me How to Ask Again: Question Data Augmentation with Controllable Rewriting in Continuous Space</i>	
Dayiheng Liu, Yeyun Gong, Jie Fu, Yu Yan, Jiusheng Chen, Jiancheng Lv, Nan Duan and Ming Zhou	5798
<i>Training Question Answering Models From Synthetic Data</i>	
Raul Puri, Ryan Spring, Mohammad Shoeybi, Mostofa Patwary and Bryan Catanzaro	5811
<i>Few-Shot Complex Knowledge Base Question Answering via Meta Reinforcement Learning</i>	
Yuncheng Hua, Yuan-Fang Li, Gholamreza Haffari, Guilin Qi and Tongtong Wu	5827
<i>Multilingual Offensive Language Identification with Cross-lingual Embeddings</i>	
Tharindu Ranasinghe and Marcos Zampieri	5838
<i>Solving Historical Dictionary Codes with a Neural Language Model</i>	
Christopher Chu, Raphael Valenti and Kevin Knight	5845
<i>Toward Micro-Dialect Identification in Diaglossic and Code-Switched Environments</i>	
Muhammad Abdul-Mageed, Chiyu Zhang, AbdelRahim Elmadany and Lyle Ungar	5855
<i>Investigating African-American Vernacular English in Transformer-Based Text Generation</i>	
Sophie Groenwold, Lily Ou, Aesha Parekh, Samhita Honnavalli, Sharon Levy, Diba Mirza and William Yang Wang	5877
<i>Iterative Domain-Repaired Back-Translation</i>	
Hao-Ran Wei, Zhirui Zhang, Boxing Chen and Weihua Luo	5884
<i>Dynamic Data Selection and Weighting for Iterative Back-Translation</i>	
Zi-Yi Dou, Antonios Anastasopoulos and Graham Neubig	5894
<i>Revisiting Modularized Multilingual NMT to Meet Industrial Demands</i>	
Sungwon Lyu, Bokyung Son, Kichang Yang and Jaekyoung Bae	5905
<i>LAReQA: Language-Agnostic Answer Retrieval from a Multilingual Pool</i>	
Uma Roy, Noah Constant, Rami Al-Rfou, Aditya Barua, Aaron Phillips and Yinfei Yang	5919
<i>OCR Post Correction for Endangered Language Texts</i>	
Shruti Rijhwani, Antonios Anastasopoulos and Graham Neubig	5931
<i>X-FACTR: Multilingual Factual Knowledge Retrieval from Pretrained Language Models</i>	
Zhengbao Jiang, Antonios Anastasopoulos, Jun Araki, Haibo Ding and Graham Neubig	5943
<i>CCAligned: A Massive Collection of Cross-Lingual Web-Document Pairs</i>	
Ahmed El-Kishky, Vishrav Chaudhary, Francisco Guzmán and Philipp Koehn	5960
<i>Localizing Open-Ontology QA Semantic Parsers in a Day Using Machine Translation</i>	
Mehrad Moradshahi, Giovanni Campagna, Sina Semnani, Silei Xu and Monica Lam	5970
<i>Interactive Refinement of Cross-Lingual Word Embeddings</i>	
Michelle Yuan, Mozhi Zhang, Benjamin Van Durme, Leah Findlater and Jordan Boyd-Graber	5984
<i>Exploiting Sentence Order in Document Alignment</i>	
Brian Thompson and Philipp Koehn	5997

<i>XGLUE: A New Benchmark Dataset for Cross-lingual Pre-training, Understanding and Generation</i>	
Yaobo Liang, Nan Duan, Yeyun Gong, Ning Wu, Fenfei Guo, Weizhen Qi, Ming Gong, Linjun Shou, Daxin Jiang, Guihong Cao, Xiaodong Fan, Ruofei Zhang, Rahul Agrawal, Edward Cui, Sining Wei, Taroon Bharti, Ying Qiao, Jiun-Hung Chen, Winnie Wu, Shuguang Liu, Fan Yang, Daniel Campos, Rangan Majumder and Ming Zhou	6008
<i>AIN: Fast and Accurate Sequence Labeling with Approximate Inference Network</i>	
Xinyu Wang, Yong Jiang, Nguyen Bach, Tao Wang, Zhongqiang Huang, Fei Huang and Kewei Tu	6019
<i>HIT: Nested Named Entity Recognition via Head-Tail Pair and Token Interaction</i>	
Yu Wang, Yun Li, Hanghang Tong and Ziyue Zhu	6027
<i>Supertagging Combinatory Categorical Grammar with Attentive Graph Convolutional Networks</i>	
Yuanhe Tian, Yan Song and Fei Xia	6037
<i>DAGA: Data Augmentation with a Generation Approach for Low-resource Tagging Tasks</i>	
BOSHENG DING, Linlin Liu, Lidong Bing, Canasai Kruengkrai, Thien Hai Nguyen, Shafiq Joty, Luo Si and Chunyan Miao	6045
<i>Interpretable Multi-dataset Evaluation for Named Entity Recognition</i>	
Jinlan Fu, Pengfei Liu and Graham Neubig	6058
<i>Adversarial Semantic Decoupling for Recognizing Open-Vocabulary Slots</i>	
Yuanmeng Yan, Keqing He, Hong Xu, Sihong Liu, Fanyu Meng, Min Hu and Weiran XU . . .	6070
<i>Plug and Play Autoencoders for Conditional Text Generation</i>	
Florian Mai, Nikolaos Pappas, Ivan Montero, Noah A. Smith and James Henderson	6076
<i>Structure Aware Negative Sampling in Knowledge Graphs</i>	
Kian Ahrabian, Aarash Feizi, Yasmin Salehi, William L. Hamilton and Avishek Joey Bose . . .	6093
<i>Neural Mask Generator: Learning to Generate Adaptive Word Maskings for Language Model Adaptation</i>	
Minki Kang, Moon-su Han and Sung Ju Hwang	6102
<i>Autoregressive Knowledge Distillation through Imitation Learning</i>	
Alexander Lin, Jeremy Wohlwend, Howard Chen and Tao Lei	6121
<i>T3: Tree-Autoencoder Constrained Adversarial Text Generation for Targeted Attack</i>	
Boxin Wang, Hengzhi Pei, Boyuan Pan, Qian Chen, Shuohang Wang and Bo Li	6134
<i>Structured Pruning of Large Language Models</i>	
Ziheng Wang, Jeremy Wohlwend and Tao Lei	6151
<i>Effective Unsupervised Domain Adaptation with Adversarially Trained Language Models</i>	
Thuy-Trang Vu, Dinh Phung and Gholamreza Haffari	6163
<i>BAE: BERT-based Adversarial Examples for Text Classification</i>	
Siddhant Garg and Goutham Ramakrishnan	6174
<i>Adversarial Self-Supervised Data-Free Distillation for Text Classification</i>	
Xinyin Ma, Yongliang Shen, Gongfan Fang, Chen Chen, Chenghao Jia and Weiming Lu	6182
<i>BERT-ATTACK: Adversarial Attack Against BERT Using BERT</i>	
Linyang Li, Ruotian Ma, Qipeng Guo, Xiangyang Xue and Xipeng Qiu	6193

<i>The Thieves on Sesame Street are Polyglots - Extracting Multilingual Models from Monolingual APIs</i> Nitish Shirish Keskar, Bryan McCann, Caiming Xiong and Richard Socher	6203
<i>When Hearst Is not Enough: Improving Hypernymy Detection from Corpus with Distributional Models</i> Changlong Yu, Jialong Han, Peifeng Wang, Yangqiu Song, Hongming Zhang, Wilfred Ng and Shuming Shi	6208
<i>Interpreting Open-Domain Modifiers: Decomposition of Wikipedia Categories into Disambiguated Property-Value Pairs</i> Marius Pasca	6218
<i>A Synset Relation-enhanced Framework with a Try-again Mechanism for Word Sense Disambiguation</i> Ming Wang and Yinglin Wang	6229
<i>Diverse, Controllable, and Keyphrase-Aware: A Corpus and Method for News Multi-Headline Generation</i> Dayiheng Liu, Yeyun Gong, Yu Yan, Jie Fu, Bo Shao, Daxin Jiang, Jiancheng Lv and Nan Duan	6241
<i>Factual Error Correction for Abstractive Summarization Models</i> Meng Cao, Yue Dong, Jiapeng Wu and Jackie Chi Kit Cheung	6251
<i>Compressive Summarization with Plausibility and Saliency Modeling</i> Shrey Desai, Jiacheng Xu and Greg Durrett	6259
<i>Understanding Neural Abstractive Summarization Models via Uncertainty</i> Jiacheng Xu, Shrey Desai and Greg Durrett	6275
<i>Better Highlighting: Creating Sub-Sentence Summary Highlights</i> Sangwooo Cho, Kaiqiang Song, Chen Li, Dong Yu, Hassan Foroosh and Fei Liu	6282
<i>Summarizing Text on Any Aspects: A Knowledge-Informed Weakly-Supervised Approach</i> Bowen Tan, Lianhui Qin, Eric Xing and Zhiting Hu	6301
<i>BERT-enhanced Relational Sentence Ordering Network</i> Baiyun Cui, Yingming Li and Zhongfei Zhang	6310
<i>Online Conversation Disentanglement with Pointer Networks</i> Tao Yu and Shafiq Joty	6321
<i>VCDM: Leveraging Variational Bi-encoding and Deep Contextualized Word Representations for Improved Definition Modeling</i> Machel Reid, Edison Marrese-Taylor and Yutaka Matsuo	6331
<i>Coarse-to-Fine Pre-training for Named Entity Recognition</i> Xue Mengge, Bowen Yu, Zhenyu Zhang, Tingwen Liu, Yue Zhang and Bin Wang	6345
<i>Exploring and Evaluating Attributes, Values, and Structures for Entity Alignment</i> Zhiyuan Liu, Yixin Cao, Liangming Pan, Juanzi Li, Zhiyuan Liu and Tat-Seng Chua	6355
<i>Simple and Effective Few-Shot Named Entity Recognition with Structured Nearest Neighbor Learning</i> Yi Yang and Arzoo Katiyar	6365
<i>Learning Structured Representations of Entity Names using Active Learning and Weak Supervision</i> Kun Qian, Poornima Chozhiyath Raman, Yunyao Li and Lucian Popa	6376

<i>Entity Enhanced BERT Pre-training for Chinese NER</i>	
Chen Jia, Yuefeng Shi, Qinrong Yang and Yue Zhang	6384
<i>Scalable Zero-shot Entity Linking with Dense Entity Retrieval</i>	
Ledell Wu, Fabio Petroni, Martin Josifoski, Sebastian Riedel and Luke Zettlemoyer	6397
<i>A Dataset for Tracking Entities in Open Domain Procedural Text</i>	
Niket Tandon, Keisuke Sakaguchi, Bhavana Dalvi, Dheeraj Rajagopal, Peter Clark, Michal Guerquin, Kyle Richardson and Eduard Hovy	6408
<i>Design Challenges in Low-resource Cross-lingual Entity Linking</i>	
Xingyu Fu, Weijia Shi, Xiaodong Yu, Zian Zhao and Dan Roth	6418
<i>Efficient One-Pass End-to-End Entity Linking for Questions</i>	
Belinda Z. Li, Sewon Min, Srinivasan Iyer, Yashar Mehdad and Wen-tau Yih	6433
<i>LUKE: Deep Contextualized Entity Representations with Entity-aware Self-attention</i>	
Ikuya Yamada, Akari Asai, Hiroyuki Shindo, Hideaki Takeda and Yuji Matsumoto	6442
<i>Generating similes effortlessly like a Pro: A Style Transfer Approach for Simile Generation</i>	
Tuhin Chakrabarty, Smaranda Muresan and Nanyun Peng	6455
<i>STORIUM: A Dataset and Evaluation Platform for Machine-in-the-Loop Story Generation</i>	
Nader Akoury, Shufan Wang, Josh Whiting, Stephen Hood, Nanyun Peng and Mohit Iyyer ..	6470
<i>Substance over Style: Document-Level Targeted Content Transfer</i>	
Allison Hegel, Sudha Rao, Asli Celikyilmaz and Bill Dolan	6485
<i>Template Guided Text Generation for Task-Oriented Dialogue</i>	
Mihir Kale and Abhinav Rastogi	6505
<i>MOCHA: A Dataset for Training and Evaluating Generative Reading Comprehension Metrics</i>	
Anthony Chen, Gabriel Stanovsky, Sameer Singh and Matt Gardner	6521
<i>Plan ahead: Self-Supervised Text Planning for Paragraph Completion Task</i>	
Dongyeop Kang and Eduard Hovy	6533
<i>Inquisitive Question Generation for High Level Text Comprehension</i>	
Wei-Jen Ko, TE-YUAN CHEN, Yiyang Huang, Greg Durrett and Junyi Jessy Li	6544
<i>Towards Persona-Based Empathetic Conversational Models</i>	
Peixiang Zhong, Chen Zhang, Hao Wang, Yong Liu and Chunyan Miao	6556
<i>Personal Information Leakage Detection in Conversations</i>	
Qiongkai Xu, Lizhen Qu, Zeyu Gao and Gholamreza Haffari	6567
<i>Response Selection for Multi-Party Conversations with Dynamic Topic Tracking</i>	
Weishi Wang, Steven C.H. Hoi and Shafiq Joty	6581
<i>Regularizing Dialogue Generation by Imitating Implicit Scenarios</i>	
Shaoxiong Feng, Xuancheng Ren, Hongshen Chen, Bin Sun, Kan Li and Xu SUN	6592
<i>MovieChats: Chat like Humans in a Closed Domain</i>	
Hui Su, Xiaoyu Shen, Zhou Xiao, Zheng Zhang, Ernie Chang, Cheng Zhang, Cheng Niu and Jie Zhou	6605

<i>Conundrums in Entity Coreference Resolution: Making Sense of the State of the Art</i> Jing Lu and Vincent Ng	6620
<i>Semantic Role Labeling Guided Multi-turn Dialogue ReWriter</i> Kun Xu, Haochen Tan, Linfeng Song, Han Wu, Haisong Zhang, Linqi Song and Dong Yu ...	6632
<i>Continuity of Topic, Interaction, and Query: Learning to Quote in Online Conversations</i> Lingzhi Wang, Jing Li, Xingshan Zeng, Haisong Zhang and Kam-Fai Wong	6640
<i>Profile Consistency Identification for Open-domain Dialogue Agents</i> Haoyu Song, Yan Wang, Wei-Nan Zhang, Zhengyu Zhao, Ting Liu and Xiaojiang Liu	6651
<i>An Element-aware Multi-representation Model for Law Article Prediction</i> Huilin Zhong, Junsheng Zhou, Weiguang QU, Yunfei Long and Yanhui Gu	6663
<i>Recurrent Event Network: Autoregressive Structure Inference over Temporal Knowledge Graphs</i> Woojeong Jin, Meng Qu, Xisen Jin and Xiang Ren	6669
<i>Multi-resolution Annotations for Emoji Prediction</i> Weicheng Ma, RuiBo Liu, Lili Wang and Soroush Vosoughi	6684
<i>Less is More: Attention Supervision with Counterfactuals for Text Classification</i> Seungtaek Choi, Haeju Park, Jinyoung Yeo and Seung-won Hwang	6695
<i>MODE-LSTM: A Parameter-efficient Recurrent Network with Multi-Scale for Sentence Classification</i> Qianli Ma, Zhenxi Lin, Jiangyue Yan, Zipeng Chen and Liuhong Yu	6705
<i>HSCNN: A Hybrid-Siamese Convolutional Neural Network for Extremely Imbalanced Multi-label Text Classification</i> Wenshuo Yang, Jiyi Li, Fumiyo Fukumoto and Yanming Ye	6716
<i>Multi-Stage Pre-training for Automated Chinese Essay Scoring</i> Wei Song, Kai Zhang, Ruiji Fu, Lizhen Liu, Ting Liu and Miaomiao Cheng	6723
<i>Multi-hop Inference for Question-driven Summarization</i> Yang Deng, Wenxuan Zhang and Wai Lam	6734
<i>Towards Interpretable Reasoning over Paragraph Effects in Situation</i> Mucheng Ren, Xiubo Geng, Tao QIN, Heyan Huang and Daxin Jiang	6745
<i>Question Directed Graph Attention Network for Numerical Reasoning over Text</i> Kunlong Chen, Weidi Xu, Xingyi Cheng, Zou Xiaochuan, Yuyu Zhang, Le Song, Taifeng Wang, Yuan Qi and Wei Chu	6759
<i>Dense Passage Retrieval for Open-Domain Question Answering</i> Vladimir Karpukhin, Barlas Oguz, Sewon Min, Patrick Lewis, Ledell Wu, Sergey Edunov, Danqi Chen and Wen-tau Yih	6769
<i>Distilling Structured Knowledge for Text-Based Relational Reasoning</i> Jin Dong, Marc-Antoine Rondeau and William L. Hamilton	6782
<i>Asking without Telling: Exploring Latent Ontologies in Contextual Representations</i> Julian Michael, Jan A. Botha and Ian Tenney	6792
<i>Pretrained Language Model Embryology: The Birth of ALBERT</i> Cheng-Han Chiang, Sung-Feng Huang and Hung-yi Lee	6813

<i>Learning Music Helps You Read: Using Transfer to Study Linguistic Structure in Language Models</i> Isabel Papadimitriou and Dan Jurafsky	6829
<i>What Do Position Embeddings Learn? An Empirical Study of Pre-Trained Language Model Positional Encoding</i> Yu-An Wang and Yun-Nung Chen.....	6840
<i>“You are grounded!”: Latent Name Artifacts in Pre-trained Language Models</i> Vered Shwartz, Rachel Rudinger and Oyvind Tafjord.....	6850
<i>Birds have four legs?! NumerSense: Probing Numerical Commonsense Knowledge of Pre-Trained Language Models</i> Bill Yuchen Lin, Seyeon Lee, Rahul Khanna and Xiang Ren	6862
<i>Grounded Adaptation for Zero-shot Executable Semantic Parsing</i> Victor Zhong, Mike Lewis, Sida I. Wang and Luke Zettlemoyer	6869
<i>An Imitation Game for Learning Semantic Parsers from User Interaction</i> Ziyu Yao, Yiqi Tang, Wen-tau Yih, Huan Sun and Yu Su.....	6883
<i>IGSQL: Database Schema Interaction Graph Based Neural Model for Context-Dependent Text-to-SQL Generation</i> Yitao Cai and Xiaojun Wan.....	6903
<i>“What Do You Mean by That?” A Parser-Independent Interactive Approach for Enhancing Text-to-SQL</i> Yuntao Li, Bei Chen, Qian Liu, Yan Gao, Jian-Guang LOU, Yan Zhang and Dongmei Zhang	6913
<i>DuSQL: A Large-Scale and Pragmatic Chinese Text-to-SQL Dataset</i> Lijie Wang, Ao Zhang, Kun Wu, Ke Sun, Zhenghua Li, Hua Wu, Min Zhang and Haifeng Wang	6923
<i>Mention Extraction and Linking for SQL Query Generation</i> Jianqiang Ma, ZEYU YAN, Shuai Pang, Yang Zhang and Jianping Shen	6936
<i>Re-examining the Role of Schema Linking in Text-to-SQL</i> Wenqiang Lei, Weixin Wang, Zhixin MA, Tian Gan, Wei Lu, Min-Yen Kan and Tat-Seng Chua	6943
<i>A Multi-Task Incremental Learning Framework with Category Name Embedding for Aspect-Category Sentiment Analysis</i> Zehui Dai, Cheng Peng, Huajie Chen and Yadong Ding	6955
<i>Train No Evil: Selective Masking for Task-Guided Pre-Training</i> Yuxian Gu, Zhengyan Zhang, Xiaozhi Wang, Zhiyuan Liu and Maosong Sun	6966
<i>SentiLARE: Sentiment-Aware Language Representation Learning with Linguistic Knowledge</i> Pei Ke, Haozhe Ji, Siyang Liu, Xiaoyan Zhu and Minlie Huang	6975
<i>Weakly-Supervised Aspect-Based Sentiment Analysis via Joint Aspect-Sentiment Topic Embedding</i> Jiaxin Huang, Yu Meng, Fang Guo, Heng Ji and Jiawei Han	6989
<i>APE: Argument Pair Extraction from Peer Review and Rebuttal via Multi-task Learning</i> Liyang Cheng, Lidong Bing, Qian Yu, Wei Lu and Luo Si	7000
<i>Diversified Multiple Instance Learning for Document-Level Multi-Aspect Sentiment Classification</i> Yunjie Ji, Hao Liu, Bolei He, Xinyan Xiao, Hua Wu and Yanhua Yu	7012

<i>Identifying Exaggerated Language</i>	
Li Kong, Chuanyi Li, Jidong Ge, Bin Luo and Vincent Ng	7024
<i>Unified Feature and Instance Based Domain Adaptation for Aspect-Based Sentiment Analysis</i>	
Chenggong Gong, Jianfei Yu and Rui Xia	7035
<i>Compositional and Lexical Semantics in RoBERTa, BERT and DistilBERT: A Case Study on CoQA</i>	
Ieva Staliūnaitė and Ignacio Jacobacci	7046
<i>Attention is Not Only a Weight: Analyzing Transformers with Vector Norms</i>	
Goro Kobayashi, Tatsuki Kuribayashi, Sho Yokoi and Kentaro Inui	7057
<i>F1 is Not Enough! Models and Evaluation Towards User-Centered Explainable Question Answering</i>	
Hendrik Schuff, Heike Adel and Ngoc Thang Vu	7076
<i>On the Ability and Limitations of Transformers to Recognize Formal Languages</i>	
Satwik Bhattamishra, Kabir Ahuja and Navin Goyal	7096
<i>An Unsupervised Joint System for Text Generation from Knowledge Graphs and Semantic Parsing</i>	
Martin Schmitt, Sahand Sharifzadeh, Volker Tresp and Hinrich Schütze	7117
<i>DGST: a Dual-Generator Network for Text Style Transfer</i>	
Xiao Li, Guanyi Chen, Chenghua Lin and Ruizhe Li	7131
<i>A Knowledge-Aware Sequence-to-Tree Network for Math Word Problem Solving</i>	
Qinzhuo Wu, Qi Zhang, Jinlan Fu and Xuanjing Huang	7137
<i>Generating Fact Checking Briefs</i>	
Angela Fan, Aleksandra Piktus, Fabio Petroni, Guillaume Wenzek, Marzieh Saeidi, Andreas Vla- chos, Antoine Bordes and Sebastian Riedel	7147
<i>Improving the Efficiency of Grammatical Error Correction with Erroneous Span Detection and Correc- tion</i>	
Mengyun Chen, Tao Ge, Xingxing Zhang, Furu Wei and Ming Zhou	7162
<i>Coreferential Reasoning Learning for Language Representation</i>	
Deming Ye, Yankai Lin, Jiaju Du, Zhenghao Liu, Peng Li, Maosong Sun and Zhiyuan Liu ...	7170
<i>Is Graph Structure Necessary for Multi-hop Question Answering?</i>	
Nan Shao, Yiming Cui, Ting Liu, Shijin Wang and Guoping Hu	7187
<i>XL-WiC: A Multilingual Benchmark for Evaluating Semantic Contextualization</i>	
Alessandro Raganato, Tommaso Pasini, Jose Camacho-Collados and Mohammad Taher Pilehvar	7193
<i>Generational or "How We Went beyond Word Sense Inventories and Learned to Gloss"</i>	
Michele Bevilacqua, Marco Maru and Roberto Navigli	7207
<i>Probing Pretrained Language Models for Lexical Semantics</i>	
Ivan Vulić, Edoardo Maria Ponti, Robert Litschko, Goran Glavaš and Anna Korhonen	7222
<i>Cross-lingual Spoken Language Understanding with Regularized Representation Alignment</i>	
Zihan Liu, Genta Indra Winata, Peng Xu, Zhaojiang Lin and Pascale Fung	7241
<i>SLURP: A Spoken Language Understanding Resource Package</i>	
Emanuele Bastianelli, Andrea Vanzo, Pawel Swietojanski and Verena Rieser	7252

<i>Neural Conversational QA: Learning to Reason vs Exploiting Patterns</i>	
Nikhil Verma, Abhishek Sharma, Dhiraj Madan, Danish Contractor, Harshit Kumar and Sachindra Joshi	7263
<i>Counterfactual Generator: A Weakly-Supervised Method for Named Entity Recognition</i>	
Xiangji Zeng, Yunliang Li, Yuchen Zhai and Yin Zhang	7270
<i>Understanding Procedural Text using Interactive Entity Networks</i>	
Jizhi Tang, Yansong Feng and Dongyan Zhao	7281
<i>A Rigorous Study on Named Entity Recognition: Can Fine-tuning Pretrained Model Lead to the Promised Land?</i>	
Hongyu Lin, Yaojie Lu, Jialong Tang, Xianpei Han, Le Sun, Zhicheng Wei and Nicholas Jing Yuan	7291
<i>DyERNIE: Dynamic Evolution of Riemannian Manifold Embeddings for Temporal Knowledge Graph Completion</i>	
Zhen Han, Peng Chen, Yunpu Ma and Volker Tresp	7301
<i>Embedding Words in Non-Vector Space with Unsupervised Graph Learning</i>	
Max Ryabinin, Sergei Popov, Liudmila Prokhorenkova and Elena Voita	7317
<i>Debiasing knowledge graph embeddings</i>	
Joseph Fisher, Arpit Mittal, Dave Palfrey and Christos Christodoulopoulos	7332
<i>Message Passing for Hyper-Relational Knowledge Graphs</i>	
Mikhail Galkin, Priyansh Trivedi, Gaurav Maheshwari, Ricardo Usbeck and Jens Lehmann ..	7346
<i>Relation-aware Graph Attention Networks with Relational Position Encodings for Emotion Recognition in Conversations</i>	
Taichi Ishiwatari, Yuki Yasuda, Taro Miyazaki and Jun Goto	7360
<i>BERT Knows Punta Cana is not just beautiful, it's gorgeous: Ranking Scalar Adjectives with Contextualised Representations</i>	
Aina Garí Soler and Marianna Apidianaki	7371
<i>Feature Adaptation of Pre-Trained Language Models across Languages and Domains with Robust Self-Training</i>	
Hai Ye, Qingyu Tan, Ruidan He, Juntao Li, Hwee Tou Ng and Lidong Bing	7386
<i>Textual Data Augmentation for Efficient Active Learning on Tiny Datasets</i>	
Husam Quteineh, Spyridon Samothrakis and Richard Sutcliffe	7400
<i>"I'd rather just go to bed": Understanding Indirect Answers</i>	
Annie Louis, Dan Roth and Filip Radlinski	7411
<i>PowerTransformer: Unsupervised Controllable Revision for Biased Language Correction</i>	
Xinyao Ma, Maarten Sap, Hannah Rashkin and Yejin Choi	7426
<i>MEGA RST Discourse Treebanks with Structure and Nuclearity from Scalable Distant Sentiment Supervision</i>	
Patrick Huber and Giuseppe Carenini	7442
<i>Centering-based Neural Coherence Modeling with Hierarchical Discourse Segments</i>	
Sungho Jeon and Michael Strube	7458

<i>Keeping Up Appearances: Computational Modeling of Face Acts in Persuasion Oriented Discussions</i> Ritam Dutt, Rishabh Joshi and Carolyn Rose	7473
<i>HABERTOR: An Efficient and Effective Deep Hatespeech Detector</i> Thanh Tran, Yifan Hu, Changwei Hu, Kevin Yen, Fei Tan, Kyumin Lee and Se Rim Park	7486
<i>An Empirical Study on Large-Scale Multi-Label Text Classification Including Few and Zero-Shot Labels</i> Ilias Chalkidis, Manos Fergadiotis, Sotiris Kotitsas, Prodromos Malakasiotis, Nikolaos Aletras and Ion Androutsopoulos	7503
<i>Which *BERT? A Survey Organizing Contextualized Encoders</i> Patrick Xia, Shijie Wu and Benjamin Van Durme	7516
<i>Fact or Fiction: Verifying Scientific Claims</i> David Wadden, Shanchuan Lin, Kyle Lo, Lucy Lu Wang, Madeleine van Zuylen, Arman Cohan and Hannaneh Hajishirzi	7534
<i>Semantic Role Labeling as Syntactic Dependency Parsing</i> Tianze Shi, Igor Malioutov and Ozan Irsoy	7551
<i>PARADE: A New Dataset for Paraphrase Identification Requiring Computer Science Domain Knowledge</i> Yun He, Zhuoer Wang, Yin Zhang, Ruihong Huang and James Caverlee	7572
<i>Causal Inference of Script Knowledge</i> Noah Weber, Rachel Rudinger and Benjamin Van Durme	7583
<i>Towards Debiasing NLU Models from Unknown Biases</i> Prasetya Ajie Utama, Nafise Sadat Moosavi and Iryna Gurevych	7597
<i>On the Role of Supervision in Unsupervised Constituency Parsing</i> Haoyue Shi, Karen Livescu and Kevin Gimpel	7611
<i>Language Model Prior for Low-Resource Neural Machine Translation</i> Christos Baziotis, Barry Haddow and Alexandra Birch	7622
<i>Detecting Word Sense Disambiguation Biases in Machine Translation for Model-Agnostic Adversarial Attacks</i> Denis Emelin, Ivan Titov and Rico Sennrich	7635
<i>MAD-X: An Adapter-Based Framework for Multi-Task Cross-Lingual Transfer</i> Jonas Pfeiffer, Ivan Vulić, Iryna Gurevych and Sebastian Ruder	7654
<i>Translation Artifacts in Cross-lingual Transfer Learning</i> Mikel Artetxe, Gorka Labaka and Eneko Agirre	7674
<i>A Time-Aware Transformer Based Model for Suicide Ideation Detection on Social Media</i> Ramit Sawhney, Harshit Joshi, Saumya Gandhi and Rajiv Ratn Shah	7685
<i>Weakly Supervised Learning of Nuanced Frames for Analyzing Polarization in News Media</i> Shamik Roy and Dan Goldwasser	7698
<i>Where Are the Facts? Searching for Fact-checked Information to Alleviate the Spread of Fake News</i> Nguyen Vo and Kyumin Lee	7717
<i>Fortifying Toxic Speech Detectors Against Veiled Toxicity</i> Xiaochuang Han and Yulia Tsvetkov	7732

<i>Explainable Automated Fact-Checking for Public Health Claims</i> Neema Kotonya and Francesca Toni	7740
<i>Interactive Fiction Game Playing as Multi-Paragraph Reading Comprehension with Reinforcement Learning</i> Xiaoxiao Guo, Mo Yu, Yupeng Gao, Chuang Gan, Murray Campbell and Shiyu Chang	7755
<i>DORB: Dynamically Optimizing Multiple Rewards with Bandits</i> Ramakanth Pasunuru, Han Guo and Mohit Bansal	7766
<i>MedFilter: Improving Extraction of Task-relevant Utterances through Integration of Discourse Structure and Ontological Knowledge</i> Sopan Khosla, Shikhar Vashishth, Jill Fain Lehman and Carolyn Rose	7781
<i>Hierarchical Evidence Set Modeling for Automated Fact Extraction and Verification</i> Shyam Subramanian and Kyumin Lee	7798
<i>Program Enhanced Fact Verification with Verbalization and Graph Attention Network</i> Xiaoyu Yang, Feng Nie, Yufei Feng, Quan Liu, Zhigang Chen and Xiaodan Zhu	7810
<i>Constrained Fact Verification for FEVER</i> Adithya Pratapa, Sai Muralidhar Jayanthi and Kavya Nerella	7826
<i>Entity Linking in 100 Languages</i> Jan A. Botha, Zifei Shan and Daniel Gillick	7833
<i>PatchBERT: Just-in-Time, Out-of-Vocabulary Patching</i> Sangwhan Moon and Naoaki Okazaki	7846
<i>On the importance of pre-training data volume for compact language models</i> Vincent Micheli, Martin d’Hoffschmidt and François Fleuret	7853
<i>BERT-of-Theseus: Compressing BERT by Progressive Module Replacing</i> Canwen Xu, Wangchunshu Zhou, Tao Ge, Furu Wei and Ming Zhou	7859
<i>Recall and Learn: Fine-tuning Deep Pretrained Language Models with Less Forgetting</i> Sanyuan Chen, Yutai Hou, Yiming Cui, Wanxiang Che, Ting Liu and Xiangzhan Yu	7870
<i>Exploring and Predicting Transferability across NLP Tasks</i> Tu Vu, Tong Wang, Tsendsuren Munkhdalai, Alessandro Sordoni, Adam Trischler, Andrew Mattarella-Micke, Subhansu Maji and Mohit Iyyer	7882
<i>To BERT or Not to BERT: Comparing Task-specific and Task-agnostic Semi-Supervised Approaches for Sequence Tagging</i> Kasturi Bhattacharjee, Miguel Ballesteros, Rishita Anubhai, Smaranda Muresan, Jie Ma, Faisal Ladhak and Yaser Al-Onaizan	7927
<i>Cold-start Active Learning through Self-supervised Language Modeling</i> Michelle Yuan, Hsuan-Tien Lin and Jordan Boyd-Graber	7935
<i>Active Learning for BERT: An Empirical Study</i> Liat Ein-Dor, Alon Halfon, Ariel Gera, Eyal Shnarch, Lena Dankin, Leshem Choshen, Marina Danilevsky, Ranit Aharonov, Yoav Katz and Noam Slonim	7949
<i>Transformer Based Multi-Source Domain Adaptation</i> Dustin Wright and Isabelle Augenstein	7963

<i>Vector-Vector-Matrix Architecture: A Novel Hardware-Aware Framework for Low-Latency Inference in NLP Applications</i>	
Matthew Khoury, Rumén Dangovski, Longwu Ou, Preslav Nakov, Yichen Shen and Li Jing . . .	7975
<i>The importance of fillers for text representations of speech transcripts</i>	
Tanvi Dinkar, Pierre Colombo, Matthieu Labeau and Chloé Clavel	7985
<i>The role of context in neural pitch accent detection in English</i>	
Elizabeth Nielsen, Mark Steedman and Sharon Goldwater	7994
<i>VOLTAGE: Volatility Forecasting via Text Audio Fusion with Graph Convolution Networks for Earnings Calls</i>	
Ramit Sawhney, Piyush Khanna, Arshiya Aggarwal, Taru Jain, Puneet Mathur and Rajiv Ratn Shah	8001
<i>Effectively pretraining a speech translation decoder with Machine Translation data</i>	
Ashkan Alinejad and Anoop Sarkar	8014
<i>A Preliminary Exploration of GANs for Keyphrase Generation</i>	
Avinash Swaminathan, Haimin Zhang, Debanjan Mahata, Rakesh Gosangi, Rajiv Ratn Shah and Amanda Stent	8021
<i>TESA: A Task in Entity Semantic Aggregation for Abstractive Summarization</i>	
Clément Jumel, Annie Louis and Jackie Chi Kit Cheung	8031
<i>MLSUM: The Multilingual Summarization Corpus</i>	
Thomas Scialom, Paul-Alexis Dray, Sylvain Lamprier, Benjamin Piwowarski and Jacopo Staiano	8051
<i>Multi-XScience: A Large-scale Dataset for Extreme Multi-document Summarization of Scientific Articles</i>	
Yao Lu, Yue Dong and Laurent Charlin	8068
<i>Intrinsic Evaluation of Summarization Datasets</i>	
Rishi Bommasani and Claire Cardie	8075
<i>Iterative Feature Mining for Constraint-Based Data Collection to Increase Data Diversity and Model Robustness</i>	
Stefan Larson, Anthony Zheng, Anish Mahendran, Rishi Tekriwal, Adrian Cheung, Eric Guldán, Kevin Leach and Jonathan K. Kummerfeld	8097
<i>Conversational Semantic Parsing for Dialog State Tracking</i>	
Jianpeng Cheng, Devang Agrawal, Héctor Martínez Alonso, Shruti Bhargava, Joris Driesen, Federico Flego, Dain Kaplan, Dimitri Kartsaklis, Lin Li, Dhivya Piraviperumal, Jason D Williams, Hong Yu, Diarmuid Ó Séaghdha and Anders Johannsen	8107
<i>doc2dial: A Goal-Oriented Document-Grounded Dialogue Dataset</i>	
Song Feng, Hui Wan, Chulaka Gunasekara, Siva Patel, Sachindra Joshi and Luis Lastras	8118
<i>Interview: Large-scale Modeling of Media Dialog with Discourse Patterns and Knowledge Grounding</i>	
Bodhisattwa Prasad Majumder, Shuyang Li, Jianmo Ni and Julian McAuley	8129
<i>INSPIRED: Toward Sociable Recommendation Dialog Systems</i>	
Shirley Anugrah Hayati, Dongyeop Kang, Qingxiaoyang Zhu, Weiyan Shi and Zhou Yu	8142

<i>Information Seeking in the Spirit of Learning: A Dataset for Conversational Curiosity</i>	
Pedro Rodriguez, Paul Crook, Seungwhan Moon and Zhiguang Wang	8153
<i>Queens are Powerful too: Mitigating Gender Bias in Dialogue Generation</i>	
Emily Dinan, Angela Fan, Adina Williams, Jack Urbanek, Douwe Kiela and Jason Weston ..	8173
<i>Discriminatively-Tuned Generative Classifiers for Robust Natural Language Inference</i>	
Xiaoan Ding, Tianyu Liu, Baobao Chang, Zhifang Sui and Kevin Gimpel	8189
<i>New Protocols and Negative Results for Textual Entailment Data Collection</i>	
Samuel R. Bowman, Jennimaria Palomaki, Livio Baldini Soares and Emily Pitler	8203
<i>The Curse of Performance Instability in Analysis Datasets: Consequences, Source, and Suggestions</i>	
Xiang Zhou, Yixin Nie, Hao Tan and Mohit Bansal	8215
<i>Universal Natural Language Processing with Limited Annotations: Try Few-shot Textual Entailment as a Start</i>	
Wenpeng Yin, Nazneen Fatema Rajani, Dragomir Radev, Richard Socher and Caiming Xiong	8229
<i>ConjNLI: Natural Language Inference Over Conjunctive Sentences</i>	
Swarnadeep Saha, Yixin Nie and Mohit Bansal	8240
<i>Data and Representation for Turkish Natural Language Inference</i>	
Emrah Budur, Rıza Özçelik, Tunga Gungor and Christopher Potts	8253
<i>Multitask Learning for Cross-Lingual Transfer of Broad-coverage Semantic Dependencies</i>	
Maryam Aminian, Mohammad Sadegh Rasooli and Mona Diab	8268
<i>Precise Task Formalization Matters in Winograd Schema Evaluations</i>	
Haokun Liu, William Huang, Dhara Mungra and Samuel R. Bowman	8275
<i>Avoiding the Hypothesis-Only Bias in Natural Language Inference via Ensemble Adversarial Training</i>	
Joe Stacey, Pasquale Minervini, Haim Dubossarsky, Sebastian Riedel and Tim Rocktäschel ..	8281
<i>SynSetExpan: An Iterative Framework for Joint Entity Set Expansion and Synonym Discovery</i>	
Jiaming Shen, Wenda Qiu, Jingbo Shang, Michelle Vanni, Xiang Ren and Jiawei Han	8292
<i>Evaluating the Calibration of Knowledge Graph Embeddings for Trustworthy Link Prediction</i>	
Tara Safavi, Danai Koutra and Edgar Meij	8308
<i>Text Graph Transformer for Document Classification</i>	
Haopeng Zhang and Jiawei Zhang	8322
<i>CoDEX: A Comprehensive Knowledge Graph Completion Benchmark</i>	
Tara Safavi and Danai Koutra	8328
<i>META: Metadata-Empowered Weak Supervision for Text Classification</i>	
Dheeraj Mekala, Xinyang Zhang and Jingbo Shang	8351
<i>Towards More Accurate Uncertainty Estimation In Text Classification</i>	
Jianfeng He, Xuchao Zhang, Shuo Lei, Zhiqian Chen, Fanglan Chen, Abdulaziz Alhamadani, Bei Xiao and ChangTien Lu	8362
<i>Chapter Captor: Text Segmentation in Novels</i>	
Charuta Pethe, Allen Kim and Steve Skiena	8373

<i>Authorship Attribution for Neural Text Generation</i>	
Adaku Uchendu, Thai Le, Kai Shu and Dongwon Lee	8384
<i>NwQM: A neural quality assessment framework for Wikipedia</i>	
Bhanu Prakash Reddy Guda, Sasi Bhushan Seelaboyina, Soumya Sarkar and Animesh Mukherjee	8396
<i>Towards Modeling Revision Requirements in wikiHow Instructions</i>	
Irshad Bhat, Talita Anthonio and Michael Roth	8407
<i>Deep Attentive Learning for Stock Movement Prediction From Social Media Text and Company Correlations</i>	
Ramit Sawhney, Shivam Agarwal, Arnav Wadhwa and Rajiv Ratn Shah	8415
<i>Natural Language Processing for Achieving Sustainable Development: the Case of Neural Labelling to Enhance Community Profiling</i>	
Costanza Conforti, Stephanie Hirmer, Dai Morgan, Marco Basaldella and Yau Ben Or	8427
<i>To Schedule or not to Schedule: Extracting Task Specific Temporal Entities and Associated Negation Constraints</i>	
Barun Patra, Chala Fufa, Pamela Bhattacharya and Charles Lee	8445
<i>Competence-Level Prediction and Resume & Job Description Matching Using Context-Aware Transformer Models</i>	
Changmao Li, Elaine Fisher, Rebecca Thomas, Steve Pittard, Vicki Hertzberg and Jinho D. Choi	8456
<i>Grammatical Error Correction in Low Error Density Domains: A New Benchmark and Analyses</i>	
Simon Flachs, Ophélie Lacroix, Helen Yannakoudakis, Marek Rei and Anders Søgaard	8467
<i>Deconstructing word embedding algorithms</i>	
Kian Kenyon-Dean, Edward Newell and Jackie Chi Kit Cheung	8479
<i>Sequential Modelling of the Evolution of Word Representations for Semantic Change Detection</i>	
Adam Tsakalidis and Maria Liakata	8485
<i>Sparsity Makes Sense: Word Sense Disambiguation Using Sparse Contextualized Word Representations</i>	
Gábor Berend	8498
<i>Exploring Semantic Capacity of Terms</i>	
Jie Huang, Zilong Wang, Kevin Chang, Wen-mei Hwu and JinJun Xiong	8509
<i>Learning to Ignore: Long Document Coreference with Bounded Memory Neural Networks</i>	
Shubham Toshniwal, Sam Wiseman, Allyson Ettinger, Karen Livescu and Kevin Gimpel	8519
<i>Revealing the Myth of Higher-Order Inference in Coreference Resolution</i>	
Liyan Xu and Jinho D. Choi	8527
<i>Pre-training Mention Representations in Coreference Models</i>	
Yuval Varkel and Amir Globerson	8534
<i>Learning Collaborative Agents with Rule Guidance for Knowledge Graph Reasoning</i>	
Deren Lei, Gangrong Jiang, Xiaotao Gu, Kexuan Sun, Yuning Mao and Xiang Ren	8541
<i>Exploring Contextualized Neural Language Models for Temporal Dependency Parsing</i>	
Hayley Ross, Jonathon Cai and Bonan Min	8548

<i>Systematic Comparison of Neural Architectures and Training Approaches for Open Information Extraction</i>	Patrick Hohenecker, Frank Mtumbuka, Vid Kocijan and Thomas Lukasiewicz	8554
<i>SeqMix: Augmenting Active Sequence Labeling via Sequence Mixup</i>	Rongzhi Zhang, Yue Yu and Chao Zhang	8566
<i>AxCell: Automatic Extraction of Results from Machine Learning Papers</i>	Marcin Kardas, Piotr Czapla, Pontus Stenetorp, Sebastian Ruder, Sebastian Riedel, Ross Taylor and Robert Stojnic	8580
<i>Knowledge-guided Open Attribute Value Extraction with Reinforcement Learning</i>	Ye Liu, Sheng Zhang, Rui Song, Suo Feng and Yanghua Xiao	8595
<i>DualTKB: A Dual Learning Bridge between Text and Knowledge Base</i>	Pierre Dognin, Igor Melnyk, Inkit Padhi, Cicero Nogueira dos Santos and Payel Das	8605
<i>Incremental Neural Coreference Resolution in Constant Memory</i>	Patrick Xia, João Sedoc and Benjamin Van Durme	8617
<i>Improving Low Compute Language Modeling with In-Domain Embedding Initialisation</i>	Charles Welch, Rada Mihalcea and Jonathan K. Kummerfeld	8625
<i>KGPT: Knowledge-Grounded Pre-Training for Data-to-Text Generation</i>	Wenhu Chen, Yu Su, Xifeng Yan and William Yang Wang	8635
<i>POINTER: Constrained Progressive Text Generation via Insertion-based Generative Pre-training</i>	Yizhe Zhang, Guoyin Wang, Chunyuan Li, Zhe Gan, Chris Brockett and Bill Dolan	8649
<i>Unsupervised Text Style Transfer with Padded Masked Language Models</i>	Eric Malmi, Aliaksei Severyn and Sascha Rothe	8671
<i>PALM: Pre-training an Autoencoding&Autoregressive Language Model for Context-conditioned Generation</i>	Bin Bi, Chenliang Li, Chen Wu, Ming Yan, Wei Wang, Songfang Huang, Fei Huang and Luo Si	8681
<i>Gradient-guided Unsupervised Lexically Constrained Text Generation</i>	Lei Sha	8692
<i>TeaForN: Teacher-Forcing with N-grams</i>	Sebastian Goodman, Nan Ding and Radu Soricut	8704
<i>Experience Grounds Language</i>	Yonatan Bisk, Ari Holtzman, Jesse Thomason, Jacob Andreas, Yoshua Bengio, Joyce Chai, Mirella Lapata, Angeliki Lazaridou, Jonathan May, Aleksandr Nisnevich, Nicolas Pinto and Joseph Turian	8718
<i>Keep CALM and Explore: Language Models for Action Generation in Text-based Games</i>	Shunyu Yao, Rohan Rao, Matthew Hausknecht and Karthik Narasimhan	8736
<i>CapWAP: Image Captioning with a Purpose</i>	Adam Fisch, Kenton Lee, Ming-Wei Chang, Jonathan Clark and Regina Barzilay	8755
<i>What is More Likely to Happen Next? Video-and-Language Future Event Prediction</i>	Jie Lei, Licheng Yu, Tamara Berg and Mohit Bansal	8769

<i>X-LXMERT: Paint, Caption and Answer Questions with Multi-Modal Transformers</i> Jaemin Cho, jiasen lu, Dustin Schwenk, Hannaneh Hajishirzi and Aniruddha Kembhavi	8785
<i>Towards Understanding Sample Variance in Visually Grounded Language Generation: Evaluations and Observations</i> Wanrong Zhu, Xin Wang, Pradyumna Narayana, Kazoo Sone, Sugato Basu and William Yang Wang	8806
<i>Beyond Instructional Videos: Probing for More Diverse Visual-Textual Grounding on YouTube</i> Jack Hessel, Zhenhai Zhu, Bo Pang and Radu Soricut	8812
<i>Hierarchical Graph Network for Multi-hop Question Answering</i> Yuwei Fang, Siqi Sun, Zhe Gan, Rohit Pillai, Shuohang Wang and Jingjing Liu	8823
<i>A Simple Yet Strong Pipeline for HotpotQA</i> Dirk Groeneveld, Tushar Khot, and Ashish Sabharwal	8839
<i>Is Multihop QA in DiRe Condition? Measuring and Reducing Disconnected Reasoning</i> Harsh Trivedi, Niranjana Balasubramanian, Tushar Khot and Ashish Sabharwal	8846
<i>Unsupervised Question Decomposition for Question Answering</i> Ethan Perez, Patrick Lewis, Wen-tau Yih, Kyunghyun Cho and Douwe Kiela	8864
<i>SRLGRN: Semantic Role Labeling Graph Reasoning Network</i> Chen Zheng and Parisa Kordjamshidi	8881
<i>CancerEmo: A Dataset for Fine-Grained Emotion Detection</i> Tiberiu Sosea and Cornelia Caragea	8892
<i>Exploring the Role of Argument Structure in Online Debate Persuasion</i> Jialu Li, Esin Durmus and Claire Cardie	8905
<i>Zero-Shot Stance Detection: A Dataset and Model using Generalized Topic Representations</i> Emily Allaway and Kathleen McKeown	8913
<i>Sentiment Analysis of Tweets using Heterogeneous Multi-layer Network Representation and Embedding</i> Loitongbam Gyanendro Singh, Anasua Mitra and Sanasam Ranbir Singh	8932
<i>Introducing Syntactic Structures into Target Opinion Word Extraction with Deep Learning</i> Amir Pouran Ben Veyseh, Nasim Nouri, Franck Dernoncourt, Dejing Dou and Thien Huu Nguyen	8947
<i>EmoTag1200: Understanding the Association between Emojis and Emotions</i> Abu Awal Md Shoeb and Gerard de Melo	8957
<i>MIME: MIMicking Emotions for Empathetic Response Generation</i> Navonil Majumder, Pengfei Hong, Shanshan Peng, Jiankun Lu, Deepanway Ghosal, Alexander Gelbukh, Rada Mihalcea and Soujanya Poria	8968
<i>Exploiting Structured Knowledge in Text via Graph-Guided Representation Learning</i> Tao Shen, Yi Mao, Pengcheng He, Guodong Long, Adam Trischler and Weizhu Chen	8980
<i>Named Entity Recognition Only from Word Embeddings</i> Ying Luo, Hai Zhao and Junlang Zhan	8995

<i>Text Classification Using Label Names Only: A Language Model Self-Training Approach</i>	
Yu Meng, Yunyi Zhang, Jiabin Huang, Chenyan Xiong, Heng Ji, Chao Zhang and Jiawei Han	9006
<i>Neural Topic Modeling with Cycle-Consistent Adversarial Training</i>	
Xuemeng Hu, Rui Wang, Deyu Zhou and Yuxuan Xiong	9018
<i>Data Boost: Text Data Augmentation Through Reinforcement Learning Guided Conditional Generation</i>	
Ruibo Liu, Guangxuan Xu, Chenyan Jia, Weicheng Ma, Lili Wang and Soroush Vosoughi	9031
<i>A State-independent and Time-evolving Network for Early Rumor Detection in Social Media</i>	
Rui Xia, Kaizhou Xuan and Jianfei Yu	9042
<i>PyMT5: multi-mode translation of natural language and Python code with transformers</i>	
Colin Clement, Dawn Drain, Jonathan Timcheck, Alexey Svyatkovskiy and Neel Sundaresan	9052
<i>PathQG: Neural Question Generation from Facts</i>	
Siyuan Wang, Zhongyu Wei, Zhihao Fan, Zengfeng Huang, Weijian Sun, Qi ZHANG and Xuanjing Huang	9066
<i>What time is it? Temporal Analysis of Novels</i>	
Allen Kim, Charuta Pethe and Steve Skiena	9076
<i>COGS: A Compositional Generalization Challenge Based on Semantic Interpretation</i>	
Najoung Kim and Tal Linzen	9087
<i>An Analysis of Natural Language Inference Benchmarks through the Lens of Negation</i>	
Md Mosharaf Hossain, Venelin Kovatchev, Pranoy Dutta, Tiffany Kao, Elizabeth Wei and Eduardo Blanco	9106
<i>On the Sentence Embeddings from Pre-trained Language Models</i>	
Bohan Li, Hao Zhou, Junxian He, Mingxuan Wang, Yiming Yang and Lei Li	9119
<i>What Can We Learn from Collective Human Opinions on Natural Language Inference Data?</i>	
Yixin Nie, Xiang Zhou and Mohit Bansal	9131
<i>Improving Text Generation with Student-Forcing Optimal Transport</i>	
Jianqiao Li, Chunyuan Li, Guoyin Wang, Hao Fu, Yuhchen Lin, Lique Chen, Yizhe Zhang, Chenyang Tao, Ruiyi Zhang, Wenlin Wang, Dinghan Shen, Qian Yang and Lawrence Carin	9144
<i>UNION: An Unreferenced Metric for Evaluating Open-ended Story Generation</i>	
Jian Guan and Minlie Huang	9157
<i>F²-Softmax: Diversifying Neural Text Generation via Frequency Factorized Softmax</i>	
Byung-Ju Choi, Jimin Hong, David Park and Sang Wan Lee	9167
<i>Partially-Aligned Data-to-Text Generation with Distant Supervision</i>	
Zihao Fu, Bei Shi, Wai Lam, Lidong Bing and Zhiyuan Liu	9183
<i>Like hiking? You probably enjoy nature: Persona-grounded Dialog with Commonsense Expansions</i>	
Bodhisattwa Prasad Majumder, Harsh Jhamtani, Taylor Berg-Kirkpatrick and Julian McAuley	9194
<i>A Probabilistic End-To-End Task-Oriented Dialog Model with Latent Belief States towards Semi-Supervised Learning</i>	
Yichi Zhang, Zhijian Ou, Min Hu and Junlan Feng	9207

<i>The World is Not Binary: Learning to Rank with Grayscale Data for Dialogue Response Selection</i> Zibo Lin, Deng Cai, Yan Wang, Xiaojiang Liu, Haitao Zheng and Shuming Shi	9220
<i>GRADE: Automatic Graph-Enhanced Coherence Metric for Evaluating Open-Domain Dialogue Systems</i> Lishan Huang, Zheng Ye, Jinghui Qin, Liang Lin and Xiaodan Liang	9230
<i>MedDialog: Large-scale Medical Dialogue Datasets</i> Guangtao Zeng, Wenmian Yang, Zeqian Ju, Yue Yang, Sicheng Wang, Ruisi Zhang, Meng Zhou, Jiaqi Zeng, Xiangyu Dong, Ruoyu Zhang, Hongchao Fang, Penghui Zhu, Shu Chen and Pengtao Xie 9241	
<i>An information theoretic view on selecting linguistic probes</i> Zining Zhu and Frank Rudzicz	9251
<i>With Little Power Comes Great Responsibility</i> Dallas Card, Peter Henderson, Urvashi Khandelwal, Robin Jia, Kyle Mahowald and Dan Jurafsky 9263	
<i>Dataset Cartography: Mapping and Diagnosing Datasets with Training Dynamics</i> Swabha Swayamdipita, Roy Schwartz, Nicholas Lourie, Yizhong Wang, Hannaneh Hajishirzi, Noah A. Smith and Yejin Choi	9275
<i>Evaluating and Characterizing Human Rationales</i> Samuel Carton, Anirudh Rathore and Chenhao Tan	9294
<i>On Extractive and Abstractive Neural Document Summarization with Transformer Language Models</i> Jonathan Pilault, Raymond Li, Sandeep Subramanian and Chris Pal	9308
<i>Multi-Fact Correction in Abstractive Text Summarization</i> Yue Dong, Shuohang Wang, Zhe Gan, Yu Cheng, Jackie Chi Kit Cheung and Jingjing Liu . . .	9320
<i>Evaluating the Factual Consistency of Abstractive Text Summarization</i> Wojciech Kryscinski, Bryan McCann, Caiming Xiong and Richard Socher	9332
<i>Re-evaluating Evaluation in Text Summarization</i> Manik Bhandari, Pranav Narayan Gour, Atabak Ashfaq, Pengfei Liu and Graham Neubig . . .	9347
<i>VMSMO: Learning to Generate Multimodal Summary for Video-based News Articles</i> Mingzhe Li, Xiuying Chen, Shen Gao, Zhangming Chan, Dongyan Zhao and Rui Yan	9360

Conference Program

Monday, November 16, 2020

10:45–11:00 *Opening Remarks*

11:00–12:00 *Keynote I: Claire Cardie*

12:00–13:00 *Zoom Q&A Session I*

12:00–13:00 *Zoom Q&A Session Ii: Sentiment Analysis, Stylistic Analysis, and Argument Mining*

Detecting Attackable Sentences in Arguments

Yohan Jo, Seojin Bang, Emaad Manzoor, Eduard Hovy and Chris Reed

Extracting Implicitly Asserted Propositions in Argumentation

Yohan Jo, Jacky Visser, Chris Reed and Eduard Hovy

Quantitative Argument Summarization and Beyond: Cross-Domain Key Point Analysis

Roy Bar-Haim, Yoav Kantor, Lilach Eden, Roni Friedman, Dan Lahav and Noam Slonim

Unsupervised Stance Detection for Arguments from Consequences

Jonathan Kobbe, Ioana Hulpuş and Heiner Stuckenschmidt

12:00–13:00 *Zoom Q&A Session Iii: Machine Translation and Multilinguality*

BLEU might be Guilty but References are not Innocent

Markus Freitag, David Grangier and Isaac Caswell

Statistical Power and Translationese in Machine Translation Evaluation

Yvette Graham, Barry Haddow and Philipp Koehn

Simulated Multiple Reference Training Improves Low-Resource Machine Translation

Huda Khayrallah, Brian Thompson, Matt Post and Philipp Koehn

Monday, November 16, 2020 (continued)

Automatic Machine Translation Evaluation in Many Languages via Zero-Shot Paraphrasing

Brian Thompson and Matt Post

12:00–13:00 *Zoom Q&A Session Iiii: Question Answering*

PROver: Proof Generation for Interpretable Reasoning over Rules

Swarnadeep Saha, Sayan Ghosh, Shashank Srivastava and Mohit Bansal

Learning to Explain: Datasets and Models for Identifying Valid Reasoning Chains in Multihop Question-Answering

Harsh Jhamtani and Peter Clark

Self-Supervised Knowledge Triplet Learning for Zero-Shot Question Answering

Pratyay Banerjee and Chitta Baral

More Bang for Your Buck: Natural Perturbation for Robust Question Answering

Daniel Khashabi, Tushar Khot and Ashish Sabharwal

12:00–13:00 *Zoom Q&A Session Iiv: Interpretability and Analysis of Models for NLP*

A Matter of Framing: The Impact of Linguistic Formalism on Probing Results

Iliia Kuznetsov and Iryna Gurevych

Information-Theoretic Probing with Minimum Description Length

Elena Voita and Ivan Titov

Intrinsic Probing through Dimension Selection

Lucas Torroba Hennigen, Adina Williams and Ryan Cotterell

Learning Which Features Matter: RoBERTa Acquires a Preference for Linguistic Generalizations (Eventually)

Alex Warstadt, Yian Zhang, Xiaocheng Li, Haokun Liu and Samuel R. Bowman

13:00–14:00 *Zoom Q&A Session 2*

Monday, November 16, 2020 (continued)

13:00–14:00 *Zoom Q&A Session 2i: Machine Learning for NLP*

Repulsive Attention: Rethinking Multi-head Attention as Bayesian Inference

Bang An, Jie Lyu, Zhenyi Wang, Chunyuan Li, Changwei Hu, Fei Tan, Ruiyi Zhang, Yifan Hu and Changyou Chen

KERMIT: Complementing Transformer Architectures with Encoders of Explicit Syntactic Interpretations

Fabio Massimo Zanzotto, Andrea Santilli, Leonardo Ranaldi, Dario Onorati, Pierfrancesco Tommasino and Francesca Fallucchi

ETC: Encoding Long and Structured Inputs in Transformers

Joshua Ainslie, Santiago Ontanon, Chris Alberti, Vaclav Cvicek, Zachary Fisher, Philip Pham, Anirudh Ravula, Sumit Sanghai, Qifan Wang and Li Yang

Pre-Training Transformers as Energy-Based Cloze Models

Kevin Clark, Minh-Thang Luong, Quoc Le and Christopher D. Manning

Calibration of Pre-trained Transformers

Shrey Desai and Greg Durrett

13:00–14:00 *Zoom Q&A Session 2ii: NLP Applications*

Near-imperceptible Neural Linguistic Steganography via Self-Adjusting Arithmetic Coding

Jiaming Shen, Heng Ji and Jiawei Han

Multi-Dimensional Gender Bias Classification

Emily Dinan, Angela Fan, Ledell Wu, Jason Weston, Douwe Kiela and Adina Williams

FIND: Human-in-the-Loop Debugging Deep Text Classifiers

Piyawat Lertvittayakumjorn, Lucia Specia and Francesca Toni

Conversational Document Prediction to Assist Customer Care Agents

Jatin Ganhotra, Haggai Roitman, Doron Cohen, Nathaniel Mills, Chulaka Gunasekara, Yosi Mass, Sachindra Joshi, Luis Lastras and David Konopnicki

13:00–14:00 *Zoom Q&A Session 2iii: Dialog and Interactive Systems*

Monday, November 16, 2020 (continued)

Incremental Processing in the Age of Non-Incremental Encoders: An Empirical Assessment of Bidirectional Models for Incremental NLU

Brielen Madureira and David Schlangen

Augmented Natural Language for Generative Sequence Labeling

Ben Athiwaratkun, Cicero Nogueira dos Santos, Jason Krone and Bing Xiang

Dialogue Response Ranking Training with Large-Scale Human Feedback Data

Xiang Gao, Yizhe Zhang, Michel Galley, Chris Brockett and Bill Dolan

13:00–14:00 *Zoom Q&A Session 2iv: Semantics: Sentence-level Semantics, Textual Inference and Other areas*

Semantic Evaluation for Text-to-SQL with Distilled Test Suites

Ruiqi Zhong, Tao Yu and Dan Klein

Cross-Thought for Sentence Encoder Pre-training

Shuohang Wang, Yuwei Fang, Siqi Sun, Zhe Gan, Yu Cheng, Jingjing Liu and Jing Jiang

AutoQA: From Databases To QA Semantic Parsers With Only Synthetic Training Data

Silei Xu, Sina Semnani, Giovanni Campagna and Monica Lam

19:00–20:00 *Industry Panel*

20:00–21:00 *Zoom Q&A Session 3*

20:00–21:00 *Zoom Q&A Session 3i: Summarization*

A Spectral Method for Unsupervised Multi-Document Summarization

Kexiang Wang, Baobao Chang and Zhifang Sui

What Have We Achieved on Text Summarization?

Dandan Huang, Leyang Cui, Sen Yang, Guangsheng Bao, Kun Wang, Jun Xie and Yue Zhang

Q-learning with Language Model for Edit-based Unsupervised Summarization

Ryosuke Kohita, Akifumi Wachi, Yang Zhao and Ryuki Tachibana

Monday, November 16, 2020 (continued)

Friendly Topic Assistant for Transformer Based Abstractive Summarization
Zhengjue Wang, Zhibin Duan, Hao Zhang, chaojie wang, long tian, Bo Chen and
Mingyuan Zhou

20:00–21:00 *Zoom Q&A Session 3ii: Machine Learning for NLP*

Contrastive Distillation on Intermediate Representations for Language Model Compression
Siqi Sun, Zhe Gan, Yuwei Fang, Yu Cheng, Shuohang Wang and Jingjing Liu

TernaryBERT: Distillation-aware Ultra-low Bit BERT
Wei Zhang, Lu Hou, Yichun Yin, Lifeng Shang, Xiao Chen, Xin Jiang and Qun Liu

Self-Supervised Meta-Learning for Few-Shot Natural Language Classification Tasks
Trapit Bansal, Rishikesh Jha, Tsendsuren Munkhdalai and Andrew McCallum

Efficient Meta Lifelong-Learning with Limited Memory
Zirui Wang, Sanket Vaibhav Mehta, Barnabas Póczos and Jaime Carbonell

20:00–21:00 *Zoom Q&A Session 3iii: Machine Translation and Multilinguality*

Don't Use English Dev: On the Zero-Shot Cross-Lingual Evaluation of Contextual Embeddings
Phillip Keung, Yichao Lu, Julian Salazar and Vikas Bhardwaj

A Supervised Word Alignment Method based on Cross-Language Span Prediction using Multilingual BERT
Masaaki Nagata, Katsuki Chousa and Masaaki Nishino

Accurate Word Alignment Induction from Neural Machine Translation
Yun Chen, Yang Liu, Guanhua Chen, Xin Jiang and Qun Liu

ChrEn: Cherokee-English Machine Translation for Endangered Language Revitalization
Shiyue Zhang, Benjamin Frey and Mohit Bansal

20:00–21:00 *Zoom Q&A Session 3iv: Computational Social Science and Social Media*

Monday, November 16, 2020 (continued)

Unsupervised Discovery of Implicit Gender Bias

Anjalie Field and Yulia Tsvetkov

Condolence and Empathy in Online Communities

Naitian Zhou and David Jurgens

An Embedding Model for Estimating Legislative Preferences from the Frequency and Sentiment of Tweets

Gregory Spell, Brian Guay, Sunshine Hillygus and Lawrence Carin

Measuring Information Propagation in Literary Social Networks

Matthew Sims and David Bamman

Social Chemistry 101: Learning to Reason about Social and Moral Norms

Maxwell Forbes, Jena D. Hwang, Vered Shwartz, Maarten Sap and Yejin Choi

21:00–22:00 *Zoom Q&A Session 4*

21:00–22:00 *Zoom Q&A Session 4i: Information Extraction*

Event Extraction by Answering (Almost) Natural Questions

Xinya Du and Claire Cardie

Connecting the Dots: Event Graph Schema Induction with Path Language Modeling

Manling Li, Qi Zeng, Ying Lin, Kyunghyun Cho, Heng Ji, Jonathan May, Nathanael Chambers and Clare Voss

Joint Constrained Learning for Event-Event Relation Extraction

Haoyu Wang, Muhao Chen, Hongming Zhang and Dan Roth

Incremental Event Detection via Knowledge Consolidation Networks

Pengfei Cao, Yubo Chen, Jun Zhao and Taifeng Wang

Semi-supervised New Event Type Induction and Event Detection

Lifu Huang and Heng Ji

Monday, November 16, 2020 (continued)

21:00–22:00 *Zoom Q&A Session 4ii: Language Generation*

Language Generation with Multi-Hop Reasoning on Commonsense Knowledge Graph

Haozhe Ji, Pei Ke, Shaohan Huang, Furu Wei, Xiaoyan Zhu and Minlie Huang

Reformulating Unsupervised Style Transfer as Paraphrase Generation

Kalpesh Krishna, John Wieting and Mohit Iyyer

De-Biased Court's View Generation with Causality

Yiquan Wu, Kun Kuang, Yating Zhang, Xiaozhong Liu, Changlong Sun, Jun Xiao, Yueting Zhuang, Luo Si and Fei Wu

PAIR: Planning and Iterative Refinement in Pre-trained Transformers for Long Text Generation

Xinyu Hua and Lu Wang

Back to the Future: Unsupervised Backprop-based Decoding for Counterfactual and Abductive Commonsense Reasoning

Lianhui Qin, Vered Shwartz, Peter West, Chandra Bhagavatula, Jena D. Hwang, Ronan Le Bras, Antoine Bosselut and Yejin Choi

21:00–22:00 *Zoom Q&A Session 4iii: Language Grounding to Vision, Robotics and Beyond*

Where Are You? Localization from Embodied Dialog

Meera Hahn, Jacob Krantz, Dhruv Batra, Devi Parikh, James Rehg, Stefan Lee and Peter Anderson

Learning to Represent Image and Text with Denotation Graph

Bowen Zhang, Hexiang Hu, Vihan Jain, Eugene Ie and Fei Sha

Video2Commonsense: Generating Commonsense Descriptions to Enrich Video Captioning

Zhiyuan Fang, Tejas Gokhale, Pratyay Banerjee, Chitta Baral and Yezhou Yang

Does my multimodal model learn cross-modal interactions? It's harder to tell than you might think!

Jack Hessel and Lillian Lee

MUTANT: A Training Paradigm for Out-of-Distribution Generalization in Visual Question Answering

Tejas Gokhale, Pratyay Banerjee, Chitta Baral and Yezhou Yang

Monday, November 16, 2020 (continued)

21:00–22:00 *Zoom Q&A Session 4iv: Dialog and Interactive Systems*

Mitigating Gender Bias for Neural Dialogue Generation with Adversarial Learning
Haochen Liu, Wentao Wang, Yiqi Wang, Hui Liu, Zitao Liu and Jiliang Tang

Will I Sound Like Me? Improving Persona Consistency in Dialogues through Pragmatic Self-Consciousness
Hyunwoo Kim, Byeongchang Kim and Gunhee Kim

TOD-BERT: Pre-trained Natural Language Understanding for Task-Oriented Dialogue
Chien-Sheng Wu, Steven C.H. Hoi, Richard Socher and Caiming Xiong

RiSAWOZ: A Large-Scale Multi-Domain Wizard-of-Oz Dataset with Rich Semantic Annotations for Task-Oriented Dialogue Modeling
Jun Quan, Shian Zhang, Qian Cao, Zizhong Li and Deyi Xiong

Filtering Noisy Dialogue Corpora by Connectivity and Content Relatedness
Reina Akama, Sho Yokoi, Jun Suzuki and Kentaro Inui

22:00–00:00 *Gather Session 1i: Linguistic Theories, Cognitive Modeling and Psycholinguistics; Machine Translation and Multilinguality; Question Answering*

Latent Geographical Factors for Analyzing the Evolution of Dialects in Contact
Yugo Murawaki

Predicting Reference: What do Language Models Learn about Discourse Models?
Shiva Upadhye, Leon Bergen and Andrew Kehler

Word class flexibility: A deep contextualized approach
Bai Li, Guillaume Thomas, Yang Xu and Frank Rudzicz

Shallow-to-Deep Training for Neural Machine Translation
Bei Li, Ziyang Wang, Hui Liu, Yufan Jiang, Quan Du, Tong Xiao, Huizhen Wang and Jingbo Zhu

Iterative Refinement in the Continuous Space for Non-Autoregressive Neural Machine Translation
Jason Lee, Raphael Shu and Kyunghyun Cho

Monday, November 16, 2020 (continued)

Why Skip If You Can Combine: A Simple Knowledge Distillation Technique for Intermediate Layers

Yimeng Wu, Peyman Passban, Mehdi Rezagholizadeh and Qun Liu

Multi-task Learning for Multilingual Neural Machine Translation

Yiren Wang, ChengXiang Zhai and Hany Hassan

Token-level Adaptive Training for Neural Machine Translation

Shuhao Gu, Jinchao Zhang, Fandong Meng, Yang Feng, Wanying Xie, Jie Zhou and Dong Yu

Multi-Unit Transformers for Neural Machine Translation

Jianhao Yan, Fandong Meng and Jie Zhou

On the Sparsity of Neural Machine Translation Models

Yong Wang, Longyue Wang, Victor Li and Zhaopeng Tu

Incorporating a Local Translation Mechanism into Non-autoregressive Translation

Xiang Kong, Zhisong Zhang and Eduard Hovy

Self-Paced Learning for Neural Machine Translation

Yu Wan, Baosong Yang, Derek F. Wong, Yikai Zhou, Lidia S. Chao, Haibo Zhang and Boxing Chen

Long-Short Term Masking Transformer: A Simple but Effective Baseline for Document-level Neural Machine Translation

Pei Zhang, Boxing Chen, Niyu Ge and Kai Fan

Generating Diverse Translation from Model Distribution with Dropout

Xuanfu Wu, Yang Feng and Chenze Shao

Non-Autoregressive Machine Translation with Latent Alignments

Chitwan Saharia, William Chan, Saurabh Saxena and Mohammad Norouzi

Look at the First Sentence: Position Bias in Question Answering

Miyoung Ko, Jinhyuk Lee, Hyunjae Kim, Gangwoo Kim and Jaewoo Kang

ProtoQA: A Question Answering Dataset for Prototypical Common-Sense Reasoning

Michael Boratko, Xiang Li, Tim O’Gorman, Rajarshi Das, Dan Le and Andrew McCallum

Monday, November 16, 2020 (continued)

IIRC: A Dataset of Incomplete Information Reading Comprehension Questions

James Ferguson, Matt Gardner, Hannaneh Hajishirzi, Tushar Khot and Pradeep Dasigi

Unsupervised Adaptation of Question Answering Systems via Generative Self-training

Steven Rennie, Etienne Marcheret, Neil Mallinar, David Nahamoo and Vaibhava Goel

TORQUE: A Reading Comprehension Dataset of Temporal Ordering Questions

Qiang Ning, Hao Wu, Rujun Han, Nanyun Peng, Matt Gardner and Dan Roth

22:00–00:00 *Gather Session Iii: Language Generation; Machine Learning for NLP*

ToTTo: A Controlled Table-To-Text Generation Dataset

Ankur Parikh, Xuezhi Wang, Sebastian Gehrmann, Manaal Faruqui, Bhuwan Dhingra, Diyi Yang and Dipanjan Das

ENT-DESC: Entity Description Generation by Exploring Knowledge Graph

Liyang Cheng, Dekun Wu, Lidong Bing, Yan Zhang, Zhanming Jie, Wei Lu and Luo Si

Small but Mighty: New Benchmarks for Split and Rephrase

Li Zhang, Huaiyu Zhu, Siddhartha Brahma and Yunyao Li

Online Back-Parsing for AMR-to-Text Generation

Xuefeng Bai, Linfeng Song and Yue Zhang

Reading Between the Lines: Exploring Infilling in Visual Narratives

Khyathi Raghavi Chandu, Ruo-Ping Dong and Alan W Black

Acrostic Poem Generation

Rajat Agarwal and Katharina Kann

Local Additivity Based Data Augmentation for Semi-supervised NER

Jiaao Chen, Zhenghui Wang, Ran Tian, Zichao Yang and Diyi Yang

Grounded Compositional Outputs for Adaptive Language Modeling

Nikolaos Pappas, Phoebe Mulcaire and Noah A. Smith

Monday, November 16, 2020 (continued)

SSMBA: Self-Supervised Manifold Based Data Augmentation for Improving Out-of-Domain Robustness

Nathan Ng, Kyunghyun Cho and Marzyeh Ghassemi

SetConv: A New Approach for Learning from Imbalanced Data

Yang Gao, Yi-Fan Li, Yu Lin, Charu Aggarwal and Latifur Khan

Scalable Multi-Hop Relational Reasoning for Knowledge-Aware Question Answering

Yanlin Feng, Xinyue Chen, Bill Yuchen Lin, Peifeng Wang, Jun Yan and Xiang Ren

Improving Bilingual Lexicon Induction for Low Frequency Words

Jiaji Huang, Xingyu Cai and Kenneth Church

Learning VAE-LDA Models with Rounded Reparameterization Trick

Runzhi Tian, Yongyi Mao and Richong Zhang

Calibrated Language Model Fine-Tuning for In- and Out-of-Distribution Data

Lingkai Kong, Haoming Jiang, Yuchen Zhuang, Jie Lyu, Tuo Zhao and Chao Zhang

Scaling Hidden Markov Language Models

Justin Chiu and Alexander Rush

Coding Textual Inputs Boosts the Accuracy of Neural Networks

Abdul Rafae Khan, Jia Xu and Weiwei Sun

Learning from Task Descriptions

Orion Weller, Nicholas Lourie, Matt Gardner and Matthew Peters

22:00–00:00 *Gather Session Iiii: Computational Social Science and Social Media; NLP Applications; Semantics: Sentence-level Semantics, Textual Inference and Other areas*

Hashtags, Emotions, and Comments: A Large-Scale Dataset to Understand Fine-Grained Social Emotions to Online Topics

Keyang Ding, Jing Li and Yuji Zhang

Named Entity Recognition for Social Media Texts with Semantic Augmentation

Yuyang Nie, Yuanhe Tian, Xiang Wan, Yan Song and Bo Dai

Monday, November 16, 2020 (continued)

Coupled Hierarchical Transformer for Stance-Aware Rumor Verification in Social Media Conversations

Jianfei Yu, Jing Jiang, Ling Min Serena Khoo, Hai Leong Chieu and Rui Xia

Social Media Attributions in the Context of Water Crisis

Rupak Sarkar, Sayantan Mahinder, Hirak Sarkar and Ashiqur KhudaBukhsh

On the Reliability and Validity of Detecting Approval of Political Actors in Tweets

Indira Sen, Fabian Flöck and Claudia Wagner

Towards Medical Machine Reading Comprehension with Structural Knowledge and Plain Text

Dongfang Li, Baotian Hu, Qingcai Chen, Weihua Peng and Anqi Wang

Generating Radiology Reports via Memory-driven Transformer

Zhihong Chen, Yan Song, Tsung-Hui Chang and Xiang Wan

Planning and Generating Natural and Diverse Disfluent Texts as Augmentation for Disfluency Detection

Jingfeng Yang, Diyi Yang and Zhaoran Ma

Predicting Clinical Trial Results by Implicit Evidence Integration

Qiao Jin, Chuanqi Tan, Mosha Chen, Xiaozhong Liu and Songfang Huang

Explainable Clinical Decision Support from Text

Jinyue Feng, Chantal Shaib and Frank Rudzicz

A Knowledge-driven Generative Model for Multi-implication Chinese Medical Procedure Entity Normalization

Jinghui Yan, Yining Wang, Lu Xiang, Yu Zhou and Chengqing Zong

Combining Automatic Labelers and Expert Annotations for Accurate Radiology Report Labeling Using BERT

Akshay Smit, Saahil Jain, Pranav Rajpurkar, Anuj Pareek, Andrew Ng and Matthew Lungren

Benchmarking Meaning Representations in Neural Semantic Parsing

Jiaqi Guo, Qian Liu, Jian-Guang LOU, Zhenwen Li, Xueqing Liu, Tao Xie and Ting Liu

Analogous Process Structure Induction for Sub-event Sequence Prediction

Hongming Zhang, Muhao Chen, Haoyu Wang, Yangqiu Song and Dan Roth

Monday, November 16, 2020 (continued)

SLM: Learning a Discourse Language Representation with Sentence Unshuffling
Haejun Lee, Drew A. Hudson, Kangwook Lee and Christopher D. Manning

Detecting Fine-Grained Cross-Lingual Semantic Divergences without Supervision by Learning to Rank
Eleftheria Briakou and Marine Carpuat

A Bilingual Generative Transformer for Semantic Sentence Embedding
John Wieting, Graham Neubig and Taylor Berg-Kirkpatrick

Semantically Inspired AMR Alignment for the Portuguese Language
Rafael Anchiêta and Thiago Pardo

An Unsupervised Sentence Embedding Method by Mutual Information Maximization
Yan Zhang, Ruidan He, ZUOZHU LIU, Kwan Hui Lim and Lidong Bing

Compositional Phrase Alignment and Beyond
Yuki Arase and Jun'ichi Tsujii

22:00–00:00 *Gather Session Iiv: Information Extraction; Information Retrieval and Text Mining; Speech and Multimodality*

Table Fact Verification with Structure-Aware Transformer
Hongzhi Zhang, Yingyao Wang, Sirui Wang, Xuezhi Cao, Fuzheng Zhang and Zhongyuan Wang

Double Graph Based Reasoning for Document-level Relation Extraction
Shuang Zeng, Runxin Xu, Baobao Chang and Lei Li

Event Extraction as Machine Reading Comprehension
Jian Liu, Yubo Chen, Kang Liu, Wei Bi and Xiaojiang Liu

MAVEN: A Massive General Domain Event Detection Dataset
Xiaozhi Wang, Ziqi Wang, Xu Han, Wangyi Jiang, Rong Han, Zhiyuan Liu, Juanzi Li, Peng Li, Yankai Lin and Jie Zhou

Knowledge Graph Alignment with Entity-Pair Embedding
Zhichun Wang, Jinjian Yang and Xiaoju Ye

Monday, November 16, 2020 (continued)

Adaptive Attentional Network for Few-Shot Knowledge Graph Completion

Jiawei Sheng, Shu Guo, Zhenyu Chen, Juwei Yue, Lihong Wang, Tingwen Liu and Hongbo Xu

Pre-training Entity Relation Encoder with Intra-span and Inter-span Information

Yijun Wang, Changzhi Sun, Yuanbin Wu, Junchi Yan, Peng Gao and Guotong Xie

Two are Better than One: Joint Entity and Relation Extraction with Table-Sequence Encoders

Jue WANG and Wei Lu

Beyond [CLS] through Ranking by Generation

Cicero Nogueira dos Santos, Xiaofei Ma, Ramesh Nallapati, zhiheng huang and Bing Xiang

Tired of Topic Models? Clusters of Pretrained Word Embeddings Make for Fast and Good Topics too!

Suzanna Sia, Ayush Dalmia and Sabrina J. Mielke

Multi-document Summarization with Maximal Marginal Relevance-guided Reinforcement Learning

Yuning Mao, Yanru Qu, Yiqing Xie, Xiang Ren and Jiawei Han

Improving Neural Topic Models using Knowledge Distillation

Alexander Miserlis Hoyle, Pranav Goel and Philip Resnik

Short Text Topic Modeling with Topic Distribution Quantization and Negative Sampling Decoder

Xiaobao Wu, Chunping Li, Yan Zhu and Yishu Miao

Querying Across Genres for Medical Claims in News

Chaoyuan Zuo, Narayan Acharya and Ritwik Banerjee

Incorporating Multimodal Information in Open-Domain Web Keyphrase Extraction

Yansen Wang, Zhen Fan and Carolyn Rose

CMU-MOSEAS: A Multimodal Language Dataset for Spanish, Portuguese, German and French

AmirAli Bagher Zadeh, Yansheng Cao, Simon Hessner, Paul Pu Liang, Soujanya Poria and Louis-Philippe Morency

Combining Self-Training and Self-Supervised Learning for Unsupervised Disfluency Detection

Shaolei Wang, Zhongyuan Wang, Wanxiang Che and Ting Liu

Monday, November 16, 2020 (continued)

Multimodal Routing: Improving Local and Global Interpretability of Multimodal Language Analysis

Yao-Hung Hubert Tsai, Martin Ma, Muqiao Yang, Ruslan Salakhutdinov and Louis-Philippe Morency

Multistage Fusion with Forget Gate for Multimodal Summarization in Open-Domain Videos

Nayu Liu, Xian Sun, Hongfeng Yu, Wenkai Zhang and Guangluan Xu

22:00–00:00 *Gather Session 1v: Dialog and Interactive Systems; Interpretability and Analysis of Models for NLP; Language Grounding to Vision, Robotics and Beyond*

BiST: Bi-directional Spatio-Temporal Reasoning for Video-Grounded Dialogues

Hung Le, Doyen Sahoo, Nancy Chen and Steven C.H. Hoi

UniConv: A Unified Conversational Neural Architecture for Multi-domain Task-oriented Dialogues

Hung Le, Doyen Sahoo, Chenghao Liu, Nancy Chen and Steven C.H. Hoi

GraphDialog: Integrating Graph Knowledge into End-to-End Task-Oriented Dialogue Systems

Shiquan Yang, Rui Zhang and Sarah Erfani

Structured Attention for Unsupervised Dialogue Structure Induction

Liang Qiu, Yizhou Zhao, Weiyang Shi, Yuan Liang, Feng Shi, Tao Yuan, Zhou Yu and Song-Chun Zhu

Cross Copy Network for Dialogue Generation

Changzhen Ji, Xin Zhou, Yating Zhang, Xiaozhong Liu, Changlong Sun, Conghui Zhu and Tiejun Zhao

Multi-turn Response Selection using Dialogue Dependency Relations

Qi Jia, Yizhu Liu, Siyu Ren, Kenny Zhu and Haifeng Tang

Parallel Interactive Networks for Multi-Domain Dialogue State Generation

Junfan Chen, Richong Zhang, Yongyi Mao and Jie Xu

SlotRefine: A Fast Non-Autoregressive Model for Joint Intent Detection and Slot Filling

Di Wu, Liang Ding, Fan Lu and Jian Xie

An Information Bottleneck Approach for Controlling Conciseness in Rationale Extraction

Bhargavi Paranjape, Mandar Joshi, John Thickstun, Hannaneh Hajishirzi and Luke Zettlemoyer

Monday, November 16, 2020 (continued)

CrowS-Pairs: A Challenge Dataset for Measuring Social Biases in Masked Language Models

Nikita Nangia, Clara Vania, Rasika Bhalerao and Samuel R. Bowman

LOGAN: Local Group Bias Detection by Clustering

Jieyu Zhao and Kai-Wei Chang

RNNs can generate bounded hierarchical languages with optimal memory

John Hewitt, Michael Hahn, Surya Ganguli, Percy Liang and Christopher D. Manning

Detecting Independent Pronoun Bias with Partially-Synthetic Data Generation

Robert Munro and Alex (Carmen) Morrison

Visually Grounded Continual Learning of Compositional Phrases

Xisen Jin, Junyi Du, Arka Sadhu, Ram Nevatia and Xiang Ren

MAF: Multimodal Alignment Framework for Weakly-Supervised Phrase Grounding

Qinxin Wang, Hao Tan, Sheng Shen, Michael Mahoney and Zhewei Yao

Domain-Specific Lexical Grounding in Noisy Visual-Textual Documents

Gregory Yauney, Jack Hessel and David Mimno

HERO: Hierarchical Encoder for Video+Language Omni-representation Pre-training

Linjie Li, Yen-Chun Chen, Yu Cheng, Zhe Gan, Licheng Yu and Jingjing Liu

Vokenization: Improving Language Understanding with Contextualized, Visual-Grounded Supervision

Hao Tan and Mohit Bansal

Detecting Cross-Modal Inconsistency to Defend Against Neural Fake News

Reuben Tan, Bryan Plummer and Kate Saenko

Tuesday, November 17, 2020

04:00–05:00 *Zoom Q&A Session 5*

04:00–05:00 *Zoom Q&A Session 5i: Information Extraction*

Enhancing Aspect Term Extraction with Soft Prototypes

Zhuang Chen and Tiejun Qian

FedED: Federated Learning via Ensemble Distillation for Medical Relation Extraction

Dianbo Sui, Yubo Chen, Jun Zhao, Yantao Jia, Yuantao Xie and Weijian Sun

Multimodal Joint Attribute Prediction and Value Extraction for E-commerce Product

Tiangang Zhu, Yue Wang, Haoran Li, Youzheng Wu, Xiaodong He and Bowen Zhou

A Predicate-Function-Argument Annotation of Natural Language for Open-Domain Information eXpression

Mingming Sun, Wenyue Hua, Zoey Liu, Xin Wang, Kangjie Zheng and Ping Li

04:00–05:00 *Zoom Q&A Session 5ii: Language Generation*

Retrofitting Structure-aware Transformer Language Model for End Tasks

Hao Fei, Yafeng Ren and Donghong Ji

Lightweight, Dynamic Graph Convolutional Networks for AMR-to-Text Generation

Yan Zhang, Zhijiang Guo, Zhiyang Teng, Wei Lu, Shay B. Cohen, ZUOZHU LIU and Lidong Bing

If beam search is the answer, what was the question?

Clara Meister, Ryan Cotterell and Tim Vieira

04:00–05:00 *Zoom Q&A Session 5iii: Machine Learning for NLP*

Understanding the Mechanics of SPIGOT: Surrogate Gradients for Latent Structure Learning

Tsvetomila Mihaylova, Vlad Niculae and André F. T. Martins

Tuesday, November 17, 2020 (continued)

Is the Best Better? Bayesian Statistical Model Comparison for Natural Language Processing

Piotr Szymański and Kyle Gorman

Exploring Logically Dependent Multi-task Learning with Causal Inference

Wenqing Chen, Jidong Tian, Liqiang Xiao, Hao He and Yaohui Jin

Masking as an Efficient Alternative to Finetuning for Pretrained Language Models

Mengjie Zhao, Tao Lin, Fei Mi, Martin Jaggi and Hinrich Schütze

04:00–05:00 *Zoom Q&A Session 5iv: Machine Translation and Multilinguality*

Dynamic Context Selection for Document-level Neural Machine Translation via Reinforcement Learning

Xiaomian Kang, Yang Zhao, Jiajun Zhang and Chengqing Zong

Data Rejuvenation: Exploiting Inactive Training Examples for Neural Machine Translation

Wenxiang Jiao, Xing Wang, Shilin He, Irwin King, Michael Lyu and Zhaopeng Tu

Pronoun-Targeted Fine-tuning for NMT with Hybrid Losses

Prathyusha Jwalapuram, Shafiq Joty and Youlin Shen

Learning Adaptive Segmentation Policy for Simultaneous Translation

Ruiqing Zhang, Chuanqiang Zhang, Zhongjun He, Hua Wu and Haifeng Wang

Learn to Cross-lingual Transfer with Meta Graph Learning Across Heterogeneous Languages

Zheng Li, Mukul Kumar, William Headden, Bing Yin, Ying Wei, Yu Zhang and Qiang Yang

05:00–06:00 *Zoom Q&A Session 6*

05:00–06:00 *Zoom Q&A Session 6i: Syntax: Tagging, Chunking, and Parsing*

UDapter: Language Adaptation for Truly Universal Dependency Parsing

Ahmet Üstün, Arianna Bisazza, Gosse Bouma and Gertjan van Noord

Tuesday, November 17, 2020 (continued)

Uncertainty-Aware Label Refinement for Sequence Labeling

Tao Gui, Jiacheng Ye, Qi Zhang, Zhengyan Li, Zichu Fei, Yeyun Gong and Xuan-jing Huang

Adversarial Attack and Defense of Structured Prediction Models

Wenjuan Han, Liwen Zhang, Yong Jiang and Kewei Tu

Position-Aware Tagging for Aspect Sentiment Triplet Extraction

Lu Xu, Hao Li, Wei Lu and Lidong Bing

05:00–06:00 *Zoom Q&A Session 6ii: Machine Translation and Multilinguality*

Simultaneous Machine Translation with Visual Context

Ozan Caglayan, Julia Ive, Veneta Haralampieva, Pranava Madhyastha, Loïc Barrault and Lucia Specia

XCOPA: A Multilingual Dataset for Causal Commonsense Reasoning

Edoardo Maria Ponti, Goran Glavaš, Olga Majewska, Qianchu Liu, Ivan Vulić and Anna Korhonen

The Secret is in the Spectra: Predicting Cross-lingual Task Performance with Spectral Similarity Measures

Haim Dubossarsky, Ivan Vulić, Roi Reichart and Anna Korhonen

Bridging Linguistic Typology and Multilingual Machine Translation with Multi-View Language Representations

Arturo Oncevay, Barry Haddow and Alexandra Birch

05:00–06:00 *Zoom Q&A Session 6iii: Question Answering*

AnswerFact: Fact Checking in Product Question Answering

Wenxuan Zhang, Yang Deng, Jing Ma and Wai Lam

Context-Aware Answer Extraction in Question Answering

Yeon Seonwoo, Ji-Hoon Kim, Jung-Woo Ha and Alice Oh

What do Models Learn from Question Answering Datasets?

Priyanka Sen and Amir Saffari

Tuesday, November 17, 2020 (continued)

Discern: Discourse-Aware Entailment Reasoning Network for Conversational Machine Reading

Yifan Gao, Chien-Sheng Wu, Jingjing Li, Shafiq Joty, Steven C.H. Hoi, Caiming Xiong, Irwin King and Michael Lyu

05:00–06:00 *Zoom Q&A Session 6iv: Semantics: Sentence-level Semantics, Textual Inference and Other areas*

A Method for Building a Commonsense Inference Dataset based on Basic Events

Kazumasa Omura, Daisuke Kawahara and Sadao Kurohashi

Neural Deepfake Detection with Factual Structure of Text

Wanjun Zhong, Duyu Tang, Zenan Xu, Ruize Wang, Nan Duan, Ming Zhou, Jiahai Wang and Jian Yin

MultiCQA: Zero-Shot Transfer of Self-Supervised Text Matching Models on a Massive Scale

Andreas Rücklé, Jonas Pfeiffer and Iryna Gurevych

XL-AMR: Enabling Cross-Lingual AMR Parsing with Transfer Learning Techniques

Rexhina Blloshmi, Rocco Tripodi and Roberto Navigli

Improving AMR Parsing with Sequence-to-Sequence Pre-training

Dongqin Xu, Junhui Li, Muhua Zhu, Min Zhang and Guodong Zhou

06:00–08:00 *Gather Session 2i: Computational Social Science and Social Media; Machine Translation and Multilinguality; Syntax: Tagging, Chunking, and Parsing*

Hate-Speech and Offensive Language Detection in Roman Urdu

Hammad Rizwan, Muhammad Haroon Shakeel and Asim Karim

Suicidal Risk Detection for Military Personnel

Sungjoon Park, Kiwoong Park, Jaimeen Ahn and Alice Oh

Comparative Evaluation of Label-Agnostic Selection Bias in Multilingual Hate Speech Datasets

Nedjma Ousidhoum, Yangqiu Song and Dit-Yan Yeung

HENIN: Learning Heterogeneous Neural Interaction Networks for Explainable Cyberbullying Detection on Social Media

Hsin-Yu Chen and Cheng-Te Li

Tuesday, November 17, 2020 (continued)

Reactive Supervision: A New Method for Collecting Sarcasm Data

Boaz Shmueli, Lun-Wei Ku and Soumya Ray

Self-Induced Curriculum Learning in Self-Supervised Neural Machine Translation

Dana Ruiter, Josef van Genabith and Cristina España-Bonet

Towards Reasonably-Sized Character-Level Transformer NMT by Finetuning Sub-word Systems

Jindřich Libovický and Alexander Fraser

Transfer Learning and Distant Supervision for Multilingual Transformer Models: A Study on African Languages

Michael A. Hedderich, David Adelani, Dawei Zhu, Jesujoba Alabi, Udia Markus and Dietrich Klakow

Translation Quality Estimation by Jointly Learning to Score and Rank

Jingyi Zhang and Josef van Genabith

Direct Segmentation Models for Streaming Speech Translation

Javier Iranzo-Sánchez, Adrià Giménez Pastor, Joan Albert Silvestre-Cerdà, Pau Baquero-Arnal, Jorge Civera Saiz and Alfons Juan

Not Low-Resource Anymore: Aligner Ensembling, Batch Filtering, and New Datasets for Bengali-English Machine Translation

Tahmid Hasan, Abhik Bhattacharjee, Kazi Samin, Masum Hasan, Madhusudan Basak, M. Sohel Rahman and Rifat Shahriyar

CSP: Code-Switching Pre-training for Neural Machine Translation

Zhen Yang, Bojie Hu, ambyera han, shen huang and Qi Ju

Type B Reflexivization as an Unambiguous Testbed for Multilingual Multi-Task Gender Bias

Ana Valeria González, Maria Barrett, Rasmus Hvingelby, Kellie Webster and Anders Søgaard

Pre-training Multilingual Neural Machine Translation by Leveraging Alignment Information

Zehui Lin, Xiao Pan, Mingxuan Wang, Xipeng Qiu, Jiangtao Feng, Hao Zhou and Lei Li

Losing Heads in the Lottery: Pruning Transformer Attention in Neural Machine Translation

Maximiliana Behnke and Kenneth Heafield

Towards Enhancing Faithfulness for Neural Machine Translation

Rongxiang Weng, Heng Yu, Xiangpeng Wei and Weihua Luo

Tuesday, November 17, 2020 (continued)

COMET: A Neural Framework for MT Evaluation

Ricardo Rei, Craig Stewart, Ana C Farinha and Alon Lavie

Reusing a Pretrained Language Model on Languages with Limited Corpora for Unsupervised NMT

Alexandra Chronopoulou, Dario Stojanovski and Alexander Fraser

LNMap: Departures from Isomorphic Assumption in Bilingual Lexicon Induction Through Non-Linear Mapping in Latent Space

Tasnim Mohiuddin, M Saiful Bari and Shafiq Joty

Uncertainty-Aware Semantic Augmentation for Neural Machine Translation

Xiangpeng Wei, Heng Yu, Yue Hu, Rongxiang Weng, Luxi Xing and Weihua Luo

Can Automatic Post-Editing Improve NMT?

Shamil Chollampatt, Raymond HENDY Susanto, Liling Tan and Ewa Szymanska

Parsing Gapping Constructions Based on Grammatical and Semantic Roles

Yoshihide Kato and Shigeki Matsubara

Span-based discontinuous constituency parsing: a family of exact chart-based algorithms with time complexities from $O(n^6)$ down to $O(n^3)$

Caio Corro

Some Languages Seem Easier to Parse Because Their Treebanks Leak

Anders Sjøgaard

Discontinuous Constituent Parsing as Sequence Labeling

David Vilares and Carlos Gómez-Rodríguez

Modularized Syntactic Neural Networks for Sentence Classification

Haiyan Wu, Ying Liu and Shaoyun Shi

06:00–08:00 *Gather Session 2ii: Discourse and Pragmatics; Language Generation; Machine Learning for NLP; Question Answering*

TED-CDB: A Large-Scale Chinese Discourse Relation Dataset on TED Talks

Wanqiu Long, Bonnie Webber and Deyi Xiong

Tuesday, November 17, 2020 (continued)

QADiscourse - Discourse Relations as QA Pairs: Representation, Crowdsourcing and Baselines

Valentina Pyatkin, Ayal Klein, Reut Tsarfaty and Ido Dagan

Discourse Self-Attention for Discourse Element Identification in Argumentative Student Essays

Wei Song, Ziyao Song, Ruiji Fu, Lizhen Liu, Miaomiao Cheng and Ting Liu

MEGATRON-CNTRL: Controllable Story Generation with External Knowledge Using Large-Scale Language Models

Peng Xu, Mostofa Patwary, Mohammad Shoeybi, Raul Puri, Pascale Fung, Anima Anandkumar and Bryan Catanzaro

Incomplete Utterance Rewriting as Semantic Segmentation

Qian Liu, Bei Chen, Jian-Guang LOU, Bin Zhou and Dongmei Zhang

Improving Grammatical Error Correction Models with Purpose-Built Adversarial Examples

Lihao Wang and Xiaoqing Zheng

Homophonic Pun Generation with Lexically Constrained Rewriting

Zhiwei Yu, Hongyu Zang and Xiaojun Wan

How to Make Neural Natural Language Generation as Reliable as Templates in Task-Oriented Dialogue

Henry Elder, Alexander O'Connor and Jennifer Foster

Multilingual AMR-to-Text Generation

Angela Fan and Claire Gardent

Exploring the Linear Subspace Hypothesis in Gender Bias Mitigation

Francisco Vargas and Ryan Cotterell

Lifelong Language Knowledge Distillation

Yung-Sung Chuang, Shang-Yu Su and Yun-Nung Chen

Sparse Parallel Training of Hierarchical Dirichlet Process Topic Models

Alexander Terenin, Måns Magnusson and Leif Jonsson

Multi-label Few/Zero-shot Learning with Knowledge Aggregated from Multiple Label Graphs

Jueqing Lu, Lan Du, Ming Liu and Joanna Dipnall

Tuesday, November 17, 2020 (continued)

Word Rotator's Distance

Sho Yokoi, Ryo Takahashi, Reina Akama, Jun Suzuki and Kentaro Inui

Disentangle-based Continual Graph Representation Learning

Xiaoyu Kou, Yankai Lin, Shaobo Liu, Peng Li, Jie Zhou and Yan Zhang

Semi-Supervised Bilingual Lexicon Induction with Two-way Interaction

Xu Zhao, Zihao Wang, Hao Wu and Yong Zhang

Wasserstein Distance Regularized Sequence Representation for Text Matching in Asymmetrical Domains

Weijie Yu, Chen Xu, Jun Xu, Liang Pang, Xiaopeng Gao, Xiaozhao Wang and Ji-Rong Wen

A Simple Approach to Learning Unsupervised Multilingual Embeddings

Pratik Jawanpuria, Mayank Meghwanshi and Bamdev Mishra

Bootstrapped Q-learning with Context Relevant Observation Pruning to Generalize in Text-based Games

Subhajit Chaudhury, Daiki Kimura, Kartik Talamadupula, Michiaki Tatsubori, Asim Munawar and Ryuki Tachibana

BERT-EMD: Many-to-Many Layer Mapping for BERT Compression with Earth Mover's Distance

jianquan li, Xiaokang Liu, Honghong Zhao, Ruifeng Xu, Min Yang and yaohong jin

Slot Attention with Value Normalization for Multi-Domain Dialogue State Tracking

Yexiang Wang, Yi Guo and Siqi Zhu

Don't Read Too Much Into It: Adaptive Computation for Open-Domain Question Answering

Yuxiang Wu, Sebastian Riedel, Pasquale Minervini and Pontus Stenetorp

Multi-Step Inference for Reasoning Over Paragraphs

Jiangming Liu, Matt Gardner, Shay B. Cohen and Mirella Lapata

Learning a Cost-Effective Annotation Policy for Question Answering

Bernhard Kratzwald, Stefan Feuerriegel and Huan Sun

Scene Restoring for Narrative Machine Reading Comprehension

Zhixing Tian, Yuanzhe Zhang, Kang Liu, Jun Zhao, Yantao Jia and Zhicheng Sheng

Tuesday, November 17, 2020 (continued)

A Simple and Effective Model for Answering Multi-span Questions

Elad Segal, Avia Efrat, Mor Shoham, Amir Globerson and Jonathan Berant

06:00–08:00 *Gather Session 2iii: Information Retrieval and Text Mining; Interpretability and Analysis of Models for NLP; Language Grounding to Vision, Robotics and Beyond*

Top-Rank-Focused Adaptive Vote Collection for the Evaluation of Domain-Specific Semantic Models

Pierangelo Lombardo, Alessio Boiardi, Luca Colombo, Angelo Schiavone and Nicolò Tamagnone

Meta Fine-Tuning Neural Language Models for Multi-Domain Text Mining

Chengyu Wang, Minghui Qiu, Jun Huang and XIAOFENG HE

Incorporating Behavioral Hypotheses for Query Generation

Ruey-Cheng Chen and Chia-Jung Lee

Conditional Causal Relationships between Emotions and Causes in Texts

Xinhong Chen, Qing Li and Jianping Wang

COMETA: A Corpus for Medical Entity Linking in the Social Media

Marco Basaldella, Fangyu Liu, Ehsan Shareghi and Nigel Collier

Pareto Probing: Trading Off Accuracy for Complexity

Tiago Pimentel, Naomi Saphra, Adina Williams and Ryan Cotterell

Interpretation of NLP models through input marginalization

Siwon Kim, Jihun Yi, Eunji Kim and Sungroh Yoon

Generating Label Cohesive and Well-Formed Adversarial Claims

Pepa Atanasova, Dustin Wright and Isabelle Augenstein

Are All Good Word Vector Spaces Isomorphic?

Ivan Vulić, Sebastian Ruder and Anders Søgaard

Cold-Start and Interpretability: Turning Regular Expressions into Trainable Recurrent Neural Networks

Chengyue Jiang, Yinggong Zhao, Shanbo Chu, Libin Shen and Kewei Tu

Tuesday, November 17, 2020 (continued)

When BERT Plays the Lottery, All Tickets Are Winning

Sai Prasanna, Anna Rogers and Anna Rumshisky

On the weak link between importance and prunability of attention heads

Aakriti Budhreja, Madhura Pande, Preksha Nema, Pratyush Kumar and Mitesh M. Khapra

Towards Interpreting BERT for Reading Comprehension Based QA

Sahana Ramnath, Preksha Nema, Deep Sahni and Mitesh M. Khapra

How do Decisions Emerge across Layers in Neural Models? Interpretation with Differentiable Masking

Nicola De Cao, Michael Sejr Schlichtkrull, Wilker Aziz and Ivan Titov

A Diagnostic Study of Explainability Techniques for Text Classification

Pepa Atanasova, Jakob Grue Simonsen, Christina Lioma and Isabelle Augenstein

STL-CQA: Structure-based Transformers with Localization and Encoding for Chart Question Answering

Hrituraj Singh and Sumit Shekhar

Learning to Contrast the Counterfactual Samples for Robust Visual Question Answering

Zujie Liang, Weitao Jiang, Haifeng Hu and Jiaying Zhu

Learning Physical Common Sense as Knowledge Graph Completion via BERT Data Augmentation and Constrained Tucker Factorization

Zhenjie Zhao, Evangelos Papalexakis and Xiaojuan Ma

A Visually-grounded First-person Dialogue Dataset with Verbal and Non-verbal Responses

Hisashi Kamezawa, Noriki Nishida, Nobuyuki Shimizu, Takashi Miyazaki and Hideki Nakayama

Cross-Media Keyphrase Prediction: A Unified Framework with Multi-Modality Multi-Head Attention and Image Wordings

Yue Wang, Jing Li, Michael Lyu and Irwin King

VD-BERT: A Unified Vision and Dialog Transformer with BERT

Yue Wang, Shafiq Joty, Michael Lyu, Irwin King, Caiming Xiong and Steven C.H. Hoi

The Grammar of Emergent Languages

Oskar van der Wal, Silvan de Boer, Elia Bruni and Dieuwke Hupkes

Tuesday, November 17, 2020 (continued)

Sub-Instruction Aware Vision-and-Language Navigation

Yicong Hong, Cristian Rodriguez, Qi Wu and Stephen Gould

06:00–08:00 *Gather Session 2iv: Dialog and Interactive Systems; Semantics: Lexical Semantics; Sentiment Analysis, Stylistic Analysis, and Argument Mining; Summarization*

Knowledge-Grounded Dialogue Generation with Pre-trained Language Models

Xueliang Zhao, wei wu, Can Xu, Chongyang Tao, Dongyan Zhao and Rui Yan

MinTL: Minimalist Transfer Learning for Task-Oriented Dialogue Systems

Zhaojiang Lin, Andrea Madotto, Genta Indra Winata and Pascale Fung

Variational Hierarchical Dialog Autoencoder for Dialog State Tracking Data Augmentation

Kang Min Yoo, Hanbit Lee, Franck Dernoncourt, Trung Bui, Walter Chang and Sang-goo Lee

Bridging the Gap between Prior and Posterior Knowledge Selection for Knowledge-Grounded Dialogue Generation

Xiuyi Chen, Fandong Meng, Peng Li, Feilong Chen, Shuang Xu, Bo Xu and Jie Zhou

Counterfactual Off-Policy Training for Neural Dialogue Generation

Qingfu Zhu, Wei-Nan Zhang, Ting Liu and William Yang Wang

Dialogue Distillation: Open-Domain Dialogue Augmentation Using Unpaired Data

Rongsheng Zhang, Yinhe Zheng, Jianzhi Shao, Xiaoxi Mao, Yadong Xi and Minlie Huang

Task-Completion Dialogue Policy Learning via Monte Carlo Tree Search with Dueling Network

Sihan Wang, kaijie zhou, Kunfeng Lai and Jianping Shen

Learning a Simple and Effective Model for Multi-turn Response Generation with Auxiliary Tasks

YUFAN ZHAO, Can Xu and wei wu

AttnIO: Knowledge Graph Exploration with In-and-Out Attention Flow for Knowledge-Grounded Dialogue

Jaehun Jung, Bokyung Son and Sungwon Lyu

Amalgamating Knowledge from Two Teachers for Task-oriented Dialogue System with Adversarial Training

Wanwei He, Min Yang, Rui Yan, Chengming Li, Ying Shen and Ruifeng Xu

Tuesday, November 17, 2020 (continued)

Task-oriented Domain-specific Meta-Embedding for Text Classification

Xin Wu, Yi Cai, Yang Kai, Tao Wang and Qing Li

Don't Neglect the Obvious: On the Role of Unambiguous Words in Word Sense Disambiguation

Daniel Loureiro and Jose Camacho-Collados

Within-Between Lexical Relation Classification

Oren Barkan, Avi Caciularu and Ido Dagan

With More Contexts Comes Better Performance: Contextualized Sense Embeddings for All-Round Word Sense Disambiguation

Bianca Scarlini, Tommaso Pasini and Roberto Navigli

Convolution over Hierarchical Syntactic and Lexical Graphs for Aspect Level Sentiment Analysis

Mi Zhang and Tiejun Qian

Multi-Instance Multi-Label Learning Networks for Aspect-Category Sentiment Analysis

Yuncong Li, Cunxiang Yin, Sheng-hua Zhong and Xu Pan

Aspect Sentiment Classification with Aspect-Specific Opinion Spans

Lu Xu, Lidong Bing, Wei Lu and Fei Huang

Emotion-Cause Pair Extraction as Sequence Labeling Based on A Novel Tagging Scheme

Chaofa Yuan, Chuang Fan, Jianzhu Bao and Ruifeng Xu

End-to-End Emotion-Cause Pair Extraction based on Sliding Window Multi-Label Learning

Zixiang Ding, Rui Xia and Jianfei Yu

Multi-modal Multi-label Emotion Detection with Modality and Label Dependence

Dong Zhang, Xincheng Ju, Junhui Li, Shoushan Li, Qiaoming Zhu and Guodong Zhou

Tasty Burgers, Soggy Fries: Probing Aspect Robustness in Aspect-Based Sentiment Analysis

Xiaoyu Xing, Zhijing Jin, Di Jin, Bingning Wang, Qi Zhang and Xuanjing Huang

Modeling Content Importance for Summarization with Pre-trained Language Models

Liqiang Xiao, Lu Wang, Hao He and Yaohui Jin

Tuesday, November 17, 2020 (continued)

Unsupervised Reference-Free Summary Quality Evaluation via Contrastive Learning

Hanlu Wu, Tengfei Ma, Lingfei Wu, Tariro Manyumwa and Shouling Ji

Neural Extractive Summarization with Hierarchical Attentive Heterogeneous Graph Network

Ruipeng Jia, Yanan Cao, Hengzhu Tang, Fang Fang, Cong Cao and Shi Wang

Coarse-to-Fine Query Focused Multi-Document Summarization

Yumo Xu and Mirella Lapata

Pre-training for Abstractive Document Summarization by Reinstating Source Text

Yanyan Zou, Xingxing Zhang, Wei Lu, Furu Wei and Ming Zhou

06:00–08:00 *Gather Session 2v: Information Extraction; NLP Applications; Phonology, Morphology and Word Segmentation; Semantics: Sentence-level Semantics, Textual Inference and Other areas*

Learning from Context or Names? An Empirical Study on Neural Relation Extraction

Hao Peng, Tianyu Gao, Xu Han, Yankai Lin, Peng Li, Zhiyuan Liu, Maosong Sun and Jie Zhou

SelfORE: Self-supervised Relational Feature Learning for Open Relation Extraction

Xuming Hu, Lijie Wen, Yusong Xu, Chenwei Zhang and Philip Yu

Denoising Relation Extraction from Document-level Distant Supervision

Chaojun Xiao, Yuan Yao, Ruobing Xie, Xu Han, Zhiyuan Liu, Maosong Sun, Fen Lin and Leyu Lin

Let's Stop Incorrect Comparisons in End-to-end Relation Extraction!

Bruno Taillé, Vincent Guigues, Geoffrey Scoutheeten and patrick Gallinari

Exposing Shallow Heuristics of Relation Extraction Models with Challenge Data

Shachar Rosenman, Alon Jacovi and Yoav Goldberg

Global-to-Local Neural Networks for Document-Level Relation Extraction

Difeng Wang, Wei Hu, Ermei Cao and Weijian Sun

Recurrent Interaction Network for Jointly Extracting Entities and Classifying Relations

Kai Sun, Richong Zhang, Samuel Mensah, Yongyi Mao and xudong Liu

Tuesday, November 17, 2020 (continued)

Temporal Knowledge Base Completion: New Algorithms and Evaluation Protocols

Prachi Jain, Sushant Rathi, Mausam and Soumen Chakrabarti

OpenIE6: Iterative Grid Labeling and Coordination Analysis for Open Information Extraction

Keshav Kolluru, Vaibhav Adlakha, Samarth Aggarwal, Mausam and Soumen Chakrabarti

Public Sentiment Drift Analysis Based on Hierarchical Variational Auto-encoder

Wenyue Zhang, Xiaoli Li, Yang Li, Suge Wang, Deyu Li, Jian Liao and Jianxing Zheng

Point to the Expression: Solving Algebraic Word Problems using the Expression-Pointer Transformer Model

Bugeun Kim, Kyung Seo Ki, Donggeon Lee and Gahgene Gweon

Semantically-Aligned Universal Tree-Structured Solver for Math Word Problems

Jinghui Qin, Lihui Lin, Xiaodan Liang, Rumin Zhang and Liang Lin

Neural Topic Modeling by Incorporating Document Relationship Graph

Deyu Zhou, Xuemeng Hu and Rui Wang

Routing Enforced Generative Model for Recipe Generation

Zhiwei Yu, Hongyu Zang and Xiaojun Wan

Assessing the Helpfulness of Learning Materials with Inference-Based Learner-Like Agent

Yun-Hsuan Jen, Chieh-Yang Huang, MeiHua Chen, Ting-Hao Huang and Lun-Wei Ku

Selection and Generation: Learning towards Multi-Product Advertisement Post Generation

Zhangming Chan, Yuchi Zhang, Xiuying Chen, Shen Gao, Zhiqiang Zhang, Dongyan Zhao and Rui Yan

Form2Seq : A Framework for Higher-Order Form Structure Extraction

Milan Aggarwal, Hires Gupta, Mausoom Sarkar and Balaji Krishnamurthy

Domain Adaptation of Thai Word Segmentation Models using Stacked Ensemble

Peerat Limkonchotiwat, Wannaphong Phatthiyaphaibun, Raheem Sarwar, Ekapol Chuangsuwanich and Sarana Nutanong

DagoBERT: Generating Derivational Morphology with a Pretrained Language Model

Valentin Hofmann, Janet Pierrehumbert and Hinrich Schütze

Tuesday, November 17, 2020 (continued)

Attention Is All You Need for Chinese Word Segmentation

Sufeng Duan and Hai Zhao

A Joint Multiple Criteria Model in Transfer Learning for Cross-domain Chinese Word Segmentation

Kaiyu Huang, Degen Huang, Zhuang Liu and Fengran Mo

Alignment-free Cross-lingual Semantic Role Labeling

Rui Cai and Mirella Lapata

Leveraging Declarative Knowledge in Text and First-Order Logic for Fine-Grained Propaganda Detection

Ruize Wang, Duyu Tang, Nan Duan, Wanjun Zhong, Zhongyu Wei, Xuanjing Huang, Daxin Jiang and Ming Zhou

X-SRL: A Parallel Cross-Lingual Semantic Role Labeling Dataset

Angel Daza and Anette Frank

Graph Convolutions over Constituent Trees for Syntax-Aware Semantic Role Labeling

Diego Marcheggiani and Ivan Titov

Fast semantic parsing with well-typedness guarantees

Matthias Lindemann, Jonas Groschwitz and Alexander Koller

11:00–12:00 *Ethics Panel Discussion*

12:00–13:00 *Zoom Q&A Session 7*

12:00–13:00 *Zoom Q&A Session 7i: Dialog and Interactive Systems*

Improving Out-of-Scope Detection in Intent Classification by Using Embeddings of the Word Graph Space of the Classes

Paulo Cavalin, Victor Henrique Alves Ribeiro, Ana Appel and Claudio Pinhanez

Supervised Seeded Iterated Learning for Interactive Language Learning

Yuchen Lu, Soumye Singhal, Florian Strub, Olivier Pietquin and Aaron Courville

Tuesday, November 17, 2020 (continued)

Spot The Bot: A Robust and Efficient Framework for the Evaluation of Conversational Dialogue Systems

Jan Deriu, Don Tuggener, Pius von Däniken, Jon Ander Campos, Alvaro Rodrigo, Thiziri Belkacem, Aitor Soroa, Eneko Agirre and Mark Cieliebak

Human-centric dialog training via offline reinforcement learning

Natasha Jaques, Judy Hanwen Shen, Asma Ghandeharioun, Craig Ferguson, Agata Lapedriza, Noah Jones, Shixiang Gu and Rosalind Picard

12:00–13:00 *Zoom Q&A Session 7ii: Linguistic Theories, Cognitive Modeling and Psycholinguistics*

Speakers Fill Lexical Semantic Gaps with Context

Tiago Pimentel, Rowan Hall Maudslay, Damian Blasi and Ryan Cotterell

Investigating Cross-Linguistic Adjective Ordering Tendencies with a Latent-Variable Model

Jun Yen Leung, Guy Emerson and Ryan Cotterell

Surprisal Predicts Code-Switching in Chinese-English Bilingual Text

Jesús Calvillo, Le Fang, Jeremy Cole and David Reitter

Word Frequency Does Not Predict Grammatical Knowledge in Language Models

Charles Yu, Ryan Sie, Nicolas Tedeschi and Leon Bergen

12:00–13:00 *Zoom Q&A Session 7iii: Semantics: Lexical Semantics*

Improving Word Sense Disambiguation with Translations

Yixing Luan, Bradley Hauer, Lili Mou and Grzegorz Kondrak

Towards Better Context-aware Lexical Semantics: Adjusting Contextualized Representations through Static Anchors

Qianchu Liu, Diana McCarthy and Anna Korhonen

Compositional Demographic Word Embeddings

Charles Welch, Jonathan K. Kummerfeld, Verónica Pérez-Rosas and Rada Mihalcea

Do “Undocumented Workers” == “Illegal Aliens”? Differentiating Denotation and Connotation in Vector Spaces

Albert Webson, Zhizhong Chen, Carsten Eickhoff and Ellie Pavlick

Tuesday, November 17, 2020 (continued)

12:00–13:00 *Zoom Q&A Session 7iv: Summarization*

Multi-View Sequence-to-Sequence Models with Conversational Structure for Abstractive Dialogue Summarization

Jiaao Chen and Diyi Yang

Few-Shot Learning for Opinion Summarization

Arthur Bražinskas, Mirella Lapata and Ivan Titov

Learning to Fuse Sentences with Transformers for Summarization

Logan Lebanoff, Franck Dernoncourt, Doo Soon Kim, Lidan Wang, Walter Chang and Fei Liu

Stepwise Extractive Summarization and Planning with Structured Transformers

Shashi Narayan, Joshua Maynez, Jakub Adamek, Daniele Pighin, Blaz Bratanić and Ryan McDonald

13:00–14:00 *Zoom Q&A Session 8*

13:00–14:00 *Zoom Q&A Session 8i: Information Retrieval and Text Mining*

CLIRMatrix: A massively large collection of bilingual and multilingual datasets for Cross-Lingual Information Retrieval

Shuo Sun and Kevin Duh

SLEDGE-Z: A Zero-Shot Baseline for COVID-19 Literature Search

Sean MacAvaney, Arman Cohan and Nazli Goharian

Modularized Transformer-based Ranking Framework

Luyu Gao, Zhuyun Dai and Jamie Callan

Ad-hoc Document Retrieval using Weak-Supervision with BERT and GPT2

Yosi Mass and Haggai Roitman

13:00–14:00 *Zoom Q&A Session 8ii: Interpretability and Analysis of Models for NLP*

Adversarial Semantic Collisions

Congzheng Song, Alexander Rush and Vitaly Shmatikov

Tuesday, November 17, 2020 (continued)

Learning Explainable Linguistic Expressions with Neural Inductive Logic Programming for Sentence Classification

Prithviraj Sen, Marina Danilevsky, Yunyao Li, Siddhartha Brahma, Matthias Boehm, Laura Chiticariu and Rajasekar Krishnamurthy

AutoPrompt: Eliciting Knowledge from Language Models with Automatically Generated Prompts

Taylor Shin, Yasaman Razeghi, Robert L Logan IV, Eric Wallace and Sameer Singh

Learning Variational Word Masks to Improve the Interpretability of Neural Text Classifiers

Hanjie Chen and Yangfeng Ji

13:00–14:00 *Zoom Q&A Session 8iii: Language Generation*

Sparse Text Generation

Pedro Henrique Martins, Zita Marinho and André F. T. Martins

PlotMachines: Outline-Conditioned Generation with Dynamic Plot State Tracking

Hannah Rashkin, Asli Celikyilmaz, Yejin Choi and Jianfeng Gao

Do sequence-to-sequence VAEs learn global features of sentences?

Tom Bosc and Pascal Vincent

Content Planning for Neural Story Generation with Aristotelian Rescoring

Seraphina Goldfarb-Tarrant, Tuhin Chakrabarty, Ralph Weischedel and Nanyun Peng

Generating Dialogue Responses from a Semantic Latent Space

Wei-Jen Ko, Avik Ray, Yilin Shen and Hongxia Jin

13:00–14:00 *Zoom Q&A Session 8iv: Language Grounding to Vision, Robotics and Beyond*

Refer, Reuse, Reduce: Generating Subsequent References in Visual and Conversational Contexts

Ece Takmaz, Mario Giulianelli, Sandro Pezzelle, Arabella Sinclair and Raquel Fernández

Visually Grounded Compound PCFGs

Yanpeng Zhao and Ivan Titov

Tuesday, November 17, 2020 (continued)

ALICE: Active Learning with Contrastive Natural Language Explanations

Weixin Liang, James Zou and Zhou Yu

Room-Across-Room: Multilingual Vision-and-Language Navigation with Dense Spatiotemporal Grounding

Alexander Ku, Peter Anderson, Roma Patel, Eugene Ie and Jason Baldridge

SSCR: Iterative Language-Based Image Editing via Self-Supervised Counterfactual Reasoning

Tsu-Jui Fu, Xin Wang, Scott Grafton, Miguel Eckstein and William Yang Wang

14:00–16:00 *Gather Session 3i: Machine Translation and Multilinguality; Semantics: Sentence-level Semantics, Textual Inference and Other areas*

Identifying Elements Essential for BERT's Multilinguality

Philipp Dufter and Hinrich Schütze

On Negative Interference in Multilingual Models: Findings and A Meta-Learning Treatment

Zirui Wang, Zachary C. Lipton and Yulia Tsvetkov

Pre-tokenization of Multi-word Expressions in Cross-lingual Word Embeddings

Naoki Otani, Satoru Ozaki, Xingyuan Zhao, Yucen Li, Micael St Johns and Lori Levin

Monolingual Adapters for Zero-Shot Neural Machine Translation

Jerin Philip, Alexandre Berard, Matthias Gallé and Laurent Besacier

Do Explicit Alignments Robustly Improve Multilingual Encoders?

Shijie Wu and Mark Dredze

From Zero to Hero: On the Limitations of Zero-Shot Language Transfer with Multilingual Transformers

Anne Lauscher, Vinit Ravishankar, Ivan Vulić and Goran Glavaš

Distilling Multiple Domains for Neural Machine Translation

Anna Currey, Prashant Mathur and Georgiana Dinu

Making Monolingual Sentence Embeddings Multilingual using Knowledge Distillation

Nils Reimers and Iryna Gurevych

Tuesday, November 17, 2020 (continued)

A Streaming Approach For Efficient Batched Beam Search

Kevin Yang, Violet Yao, John DeNero and Dan Klein

Improving Multilingual Models with Language-Clustered Vocabularies

Hyung Won Chung, Dan Garrette, Kiat Chuan Tan and Jason Riesa

Zero-Shot Cross-Lingual Transfer with Meta Learning

Farhad Nooralahzadeh, Giannis Bekoulis, Johannes Bjerva and Isabelle Augenstein

The Multilingual Amazon Reviews Corpus

Phillip Keung, Yichao Lu, György Szarvas and Noah A. Smith

GLUCOSE: GeneraLized and COntextualized Story Explanations

Nasrin Mostafazadeh, Aditya Kalyanpur, Lori Moon, David Buchanan, Lauren Berkowitz, Or Biran and Jennifer Chu-Carroll

Character-level Representations Improve DRS-based Semantic Parsing Even in the Age of BERT

Rik van Noord, Antonio Toral and Johan Bos

Infusing Disease Knowledge into BERT for Health Question Answering, Medical Inference and Disease Name Recognition

Yun He, Ziwei Zhu, Yin Zhang, Qin Chen and James Caverlee

Unsupervised Commonsense Question Answering with Self-Talk

Vered Shwartz, Peter West, Ronan Le Bras, Chandra Bhagavatula and Yejin Choi

Reasoning about Goals, Steps, and Temporal Ordering with WikiHow

Li Zhang, Qing Lyu and Chris Callison-Burch

14:00–16:00 *Gather Session 3ii: Linguistic Theories, Cognitive Modeling and Psycholinguistics; NLP Applications; Syntax: Tagging, Chunking, and Parsing*

Structural Supervision Improves Few-Shot Learning and Syntactic Generalization in Neural Language Models

Ethan Wilcox, Peng Qian, Richard Futrell, Ryosuke Kohita, Roger Levy and Miguel Ballesteros

Investigating representations of verb bias in neural language models

Robert Hawkins, Takateru Yamakoshi, Thomas Griffiths and Adele Goldberg

Tuesday, November 17, 2020 (continued)

Generating Image Descriptions via Sequential Cross-Modal Alignment Guided by Human Gaze

Ece Takmaz, Sandro Pezzelle, Lisa Beinborn and Raquel Fernández

Optimus: Organizing Sentences via Pre-trained Modeling of a Latent Space

Chunyuan Li, Xiang Gao, Yuan Li, Baolin Peng, Xiujun Li, Yizhe Zhang and Jianfeng Gao

BioMegatron: Larger Biomedical Domain Language Model

Hoo-Chang Shin, Yang Zhang, Evelina Bakhturina, Raul Puri, Mostofa Patwary, Mohammad Shoeybi and Raghav Mani

Text Segmentation by Cross Segment Attention

Michal Lukasik, Boris Dadachev, Kishore Papineni and Goncalo Simoes

RussianSuperGLUE: A Russian Language Understanding Evaluation Benchmark

Tatiana Shavrina, Alena Fenogenova, Emelyanov Anton, Denis Shevelev, Ekaterina Artemova, Valentin Malykh, Vladislav Mikhailov, Maria Tikhonova, Andrey Chertok and Andrey Evlampiev

An Empirical Study of Pre-trained Transformers for Arabic Information Extraction

Wuwei Lan, Yang Chen, Wei Xu and Alan Ritter

TNT: Text Normalization based Pre-training of Transformers for Content Moderation

Fei Tan, Yifan Hu, Changwei Hu, Keqian Li and Kevin Yen

Methods for Numeracy-Preserving Word Embeddings

Dhanasekar Sundararaman, Shijing Si, Vivek Subramanian, Guoyin Wang, Devamanyu Hazarika and Lawrence Carin

An Empirical Investigation of Contextualized Number Prediction

Taylor Berg-Kirkpatrick and Daniel Spokoyny

Modeling the Music Genre Perception across Language-Bound Cultures

Elena V. Epure, Guillaume Salha, Manuel Moussallam and Romain Hennequin

Joint Estimation and Analysis of Risk Behavior Ratings in Movie Scripts

Victor Martinez, Krishna Somandepalli, Yalda Tehranian-Uhls and Shrikanth Narayanan

Keep it Surprisingly Simple: A Simple First Order Graph Based Parsing Model for Joint Morphosyntactic Parsing in Sanskrit

Amrith Krishna, Ashim Gupta, Deepak Garasangi, Pavankumar Satuluri and Pawan Goyal

Tuesday, November 17, 2020 (continued)

Unsupervised Parsing via Constituency Tests

Steven Cao, Nikita Kitaev and Dan Klein

Please Mind the Root: Decoding Arborescences for Dependency Parsing

Ran Zmigrod, Tim Vieira and Ryan Cotterell

Unsupervised Cross-Lingual Part-of-Speech Tagging for Truly Low-Resource Scenarios

Ramy Eskander, Smaranda Muresan and Michael Collins

Unsupervised Parsing with S-DIORA: Single Tree Encoding for Deep Inside-Outside Recursive Autoencoders

Andrew Drozdov, Subendhu Rongali, Yi-Pei Chen, Tim O’Gorman, Mohit Iyyer and Andrew McCallum

14:00–16:00 *Gather Session 3iii: Interpretability and Analysis of Models for NLP; Machine Learning for NLP*

Utility is in the Eye of the User: A Critique of NLP Leaderboards

Kawin Ethayarajh and Dan Jurafsky

An Empirical Investigation Towards Efficient Multi-Domain Language Model Pre-training

Kristjan Arumae, Qing Sun and Parminder Bhatia

Analyzing Individual Neurons in Pre-trained Language Models

Nadir Durrani, Hassan Sajjad, Fahim Dalvi and Yonatan Belinkov

Dissecting Span Identification Tasks with Performance Prediction

Sean Papay, Roman Klinger and Sebastian Padó

Assessing Phrasal Representation and Composition in Transformers

Lang Yu and Allyson Ettinger

Analyzing Redundancy in Pretrained Transformer Models

Fahim Dalvi, Hassan Sajjad, Nadir Durrani and Yonatan Belinkov

Be More with Less: Hypergraph Attention Networks for Inductive Text Classification

Kaize Ding, Jianling Wang, Jundong Li, Dingcheng Li and Huan Liu

Tuesday, November 17, 2020 (continued)

Entities as Experts: Sparse Memory Access with Entity Supervision

Thibault Févry, Livio Baldini Soares, Nicholas FitzGerald, Eunsol Choi and Tom Kwiatkowski

H2KGAT: Hierarchical Hyperbolic Knowledge Graph Attention Network

Shen Wang, Xiaokai Wei, Cicero Nogueira dos Santos, Zhiguo Wang, Ramesh Nalapat, Andrew Arnold, Bing Xiang and Philip S. Yu

Does the Objective Matter? Comparing Training Objectives for Pronoun Resolution

Yordan Yordanov, Oana-Maria Camburu, Vid Kocijan and Thomas Lukasiewicz

On Losses for Modern Language Models

Stéphane Aroca-Ouellette and Frank Rudzicz

We Can Detect Your Bias: Predicting the Political Ideology of News Articles

Ramy Baly, Giovanni Da San Martino, James Glass and Preslav Nakov

Semantic Label Smoothing for Sequence to Sequence Problems

Michal Lukasik, Himanshu Jain, Aditya Menon, Seungyeon Kim, Srinadh Bhojanapalli, Felix Yu and Sanjiv Kumar

Training for Gibbs Sampling on Conditional Random Fields with Neural Scoring Factors

Sida Gao and Matthew R. Gormley

Multilevel Text Alignment with Cross-Document Attention

Xuhui Zhou, Nikolaos Pappas and Noah A. Smith

14:00–16:00 *Gather Session 3iv: Dialog and Interactive Systems; Language Generation; Phonology, Morphology and Word Segmentation*

Conversational Semantic Parsing

Armen Aghajanyan, Jean Maillard, Akshat Shrivastava, Keith Diedrick, Michael Haeger, Haoran Li, Yashar Mehdad, Veselin Stoyanov, Anuj Kumar, Mike Lewis and Sonal Gupta

Probing Task-Oriented Dialogue Representation from Language Models

Chien-Sheng Wu and Caiming Xiong

End-to-End Slot Alignment and Recognition for Cross-Lingual NLU

Weijia Xu, Batool Haider and Saab Mansour

Tuesday, November 17, 2020 (continued)

Discriminative Nearest Neighbor Few-Shot Intent Detection by Transferring Natural Language Inference

Jianguo Zhang, Kazuma Hashimoto, Wenhao Liu, Chien-Sheng Wu, Yao Wan, Philip Yu, Richard Socher and Caiming Xiong

Simple Data Augmentation with the Mask Token Improves Domain Adaptation for Dialog Act Tagging

Semih Yavuz, Kazuma Hashimoto, Wenhao Liu, Nitish Shirish Keskar, Richard Socher and Caiming Xiong

Low-Resource Domain Adaptation for Compositional Task-Oriented Semantic Parsing

Xilun Chen, Asish Ghoshal, Yashar Mehdad, Luke Zettlemoyer and Sonal Gupta

Sound Natural: Content Rephrasing in Dialog Systems

Arash Einolghozati, Anchit Gupta, Keith Diedrick and Sonal Gupta

Zero-Shot Crosslingual Sentence Simplification

Jonathan Mallinson, Rico Sennrich and Mirella Lapata

Facilitating the Communication of Politeness through Fine-Grained Paraphrasing

Liye Fu, Susan Fussell and Cristian Danescu-Niculescu-Mizil

CAT-Gen: Improving Robustness in NLP Models via Controlled Adversarial Text Generation

Tianlu Wang, Xuezhi Wang, Yao Qin, Ben Packer, Kang Li, Jilin Chen, Alex Beutel and Ed Chi

Seq2Edits: Sequence Transduction Using Span-level Edit Operations

Felix Stahlberg and Shankar Kumar

Controllable Meaning Representation to Text Generation: Linearization and Data Augmentation Strategies

Chris Kedzie and Kathleen McKeown

Blank Language Models

Tianxiao Shen, Victor Quach, Regina Barzilay and Tommi Jaakkola

COD3S: Diverse Generation with Discrete Semantic Signatures

Nathaniel Weir, João Sedoc and Benjamin Van Durme

Automatic Extraction of Rules Governing Morphological Agreement

Aditi Chaudhary, Antonios Anastasopoulos, Adithya Pratapa, David R. Mortensen, Zaid Sheikh, Yulia Tsvetkov and Graham Neubig

Tuesday, November 17, 2020 (continued)

Tackling the Low-resource Challenge for Canonical Segmentation

Manuel Mager, Özlem Çetinoğlu and Katharina Kann

IGT2P: From Interlinear Glossed Texts to Paradigms

Sarah Moeller, Ling Liu, Changbing Yang, Katharina Kann and Mans Hulden

14:00–16:00 *Gather Session 3v: Computational Social Science and Social Media; Information Extraction; Question Answering*

A Computational Approach to Understanding Empathy Expressed in Text-Based Mental Health Support

Ashish Sharma, Adam Miner, David Atkins and Tim Althoff

Modeling Protagonist Emotions for Emotion-Aware Storytelling

Faeze Brahman and Snigdha Chaturvedi

Help! Need Advice on Identifying Advice

Venkata Subrahmanyam Govindarajan, Benjamin Chen, Rebecca Warholic, Katrin Erk and Junyi Jessy Li

Quantifying Intimacy in Language

Jiaxin Pei and David Jurgens

Writing Strategies for Science Communication: Data and Computational Analysis

Tal August, Lauren Kim, Katharina Reinecke and Noah A. Smith

Weakly Supervised Subevent Knowledge Acquisition

Wenlin Yao, Zeyu Dai, Maitreyi Ramaswamy, Bonan Min and Ruihong Huang

Biomedical Event Extraction as Sequence Labeling

Alan Ramponi, Rob van der Goot, Rosario Lombardo and Barbara Plank

Annotating Temporal Dependency Graphs via Crowdsourcing

Jiarui Yao, Haoling Qiu, Bonan Min and Nianwen Xue

Introducing a New Dataset for Event Detection in Cybersecurity Texts

Hieu Man Duc Trong, Duc Trong Le, Amir Pouran Ben Veyseh, Thuat Nguyen and Thien Huu Nguyen

Tuesday, November 17, 2020 (continued)

CHARM: Inferring Personal Attributes from Conversations

Anna Tiginova, Andrew Yates, Paramita Mirza and Gerhard Weikum

Event Detection: Gate Diversity and Syntactic Importance Scores for Graph Convolution Neural Networks

Viet Dac Lai, Tuan Ngo Nguyen and Thien Huu Nguyen

Severing the Edge Between Before and After: Neural Architectures for Temporal Ordering of Events

Miguel Ballesteros, Rishita Anubhai, Shuai Wang, Nima Pourdamghani, Yogarshi Vyas, Jie Ma, Parminder Bhatia, Kathleen McKeown and Yaser Al-Onaizan

How Much Knowledge Can You Pack Into the Parameters of a Language Model?

Adam Roberts, Colin Raffel and Noam Shazeer

EXAMS: A Multi-subject High School Examinations Dataset for Cross-lingual and Multilingual Question Answering

Momchil Hardalov, Todor Mihaylov, Dimitrina Zlatkova, Yoan Dinkov, Ivan Koychev and Preslav Nakov

End-to-End Synthetic Data Generation for Domain Adaptation of Question Answering Systems

Siamak Shakeri, Cicero Nogueira dos Santos, Henghui Zhu, Patrick Ng, Feng Nan, Zhiguo Wang, Ramesh Nallapati and Bing Xiang

Multi-Stage Pre-training for Low-Resource Domain Adaptation

Rong Zhang, Revanth Gangi Reddy, Md Arafat Sultan, Vittorio Castelli, Anthony Ferritto, Radu Florian, Efsun Sarioglu Kayi, Salim Roukos, Avi Sil and Todd Ward

ISAAQ - Mastering Textbook Questions with Pre-trained Transformers and Bottom-Up and Top-Down Attention

Jose Manuel Gomez-Perez and Raúl Ortega

SubjQA: A Dataset for Subjectivity and Review Comprehension

Johannes Bjerva, Nikita Bhutani, Behzad Golshan, Wang-Chiew Tan and Isabelle Augenstein

19:00–20:00 *Keynote II: Rich Caruana*

20:00–21:00 *Zoom Q&A Session 9*

20:00–21:00 *Zoom Q&A Session 9i: Speech and Multimodality*

Tuesday, November 17, 2020 (continued)

Widget Captioning: Generating Natural Language Description for Mobile User Interface Elements

Yang Li, Gang Li, Luheng He, Jingjie Zheng, Hong Li and Zhiwei Guan

Unsupervised Natural Language Inference via Decoupled Multimodal Contrastive Learning

Wanyun Cui, Guangyu Zheng and Wei Wang

Digital Voicing of Silent Speech

David Gaddy and Dan Klein

20:00–21:00 *Zoom Q&A Session 9ii: Machine Learning for NLP*

Imitation Attacks and Defenses for Black-box Machine Translation Systems

Eric Wallace, Mitchell Stern and Dawn Song

Sequence-Level Mixed Sample Data Augmentation

Demi Guo, Yoon Kim and Alexander Rush

Consistency of a Recurrent Language Model With Respect to Incomplete Decoding

Sean Welleck, Iliia Kulikov, Jaedeok Kim, Richard Yuanzhe Pang and Kyunghyun Cho

An Exploration of Arbitrary-Order Sequence Labeling via Energy-Based Inference Networks

Lifu Tu, Tianyu Liu and Kevin Gimpel

Ensemble Distillation for Structured Prediction: Calibrated, Accurate, Fast—Choose Three

Steven Reich, David Mueller and Nicholas Andrews

20:00–21:00 *Zoom Q&A Session 9iii: Sentiment Analysis, Stylistic Analysis, and Argument Mining*

Inducing Target-Specific Latent Structures for Aspect Sentiment Classification

Chenhua Chen, Zhiyang Teng and Yue Zhang

Affective Event Classification with Discourse-enhanced Self-training

Yuan Zhuang, Tianyu Jiang and Ellen Riloff

Tuesday, November 17, 2020 (continued)

Deep Weighted MaxSAT for Aspect-based Opinion Extraction

Meixi Wu, Wenya Wang and Sinno Jialin Pan

Multi-view Story Characterization from Movie Plot Synopses and Reviews

Sudipta Kar, Gustavo Aguilar, Mirella Lapata and Thamar Solorio

21:00–22:00 *Zoom Q&A Session 10*

21:00–22:00 *Zoom Q&A Session 10i: Phonology, Morphology and Word Segmentation*

Mind Your Inflections! Improving NLP for Non-Standard Englishes with Base-Inflection Encoding

Samson Tan, Shafiq Joty, Lav Varshney and Min-Yen Kan

Measuring the Similarity of Grammatical Gender Systems by Comparing Partitions

Arya D. McCarthy, Adina Williams, Shijia Liu, David Yarowsky and Ryan Cotterell

RethinkCWS: Is Chinese Word Segmentation a Solved Task?

Jinlan Fu, Pengfei Liu, Qi Zhang and Xuanjing Huang

Learning to Pronounce Chinese Without a Pronunciation Dictionary

Christopher Chu, Scot Fang and Kevin Knight

21:00–22:00 *Zoom Q&A Session 10ii: Information Extraction*

Dynamic Anticipation and Completion for Multi-Hop Reasoning over Sparse Knowledge Graph

Xin Lv, Xu Han, Lei Hou, Juanzi Li, Zhiyuan Liu, Wei Zhang, YICHI ZHANG, Hao Kong and Suhui Wu

Knowledge Association with Hyperbolic Knowledge Graph Embeddings

Zequn Sun, Muhao Chen, Wei Hu, Chengming Wang, Jian Dai and Wei Zhang

Domain Knowledge Empowered Structured Neural Net for End-to-End Event Temporal Relation Extraction

Rujun Han, Yichao Zhou and Nanyun Peng

Tuesday, November 17, 2020 (continued)

TeMP: Temporal Message Passing for Temporal Knowledge Graph Completion

Jiapeng Wu, Meng Cao, Jackie Chi Kit Cheung and William L. Hamilton

21:00–22:00 *Zoom Q&A Session 10iii: Machine Translation and Multilinguality*

Understanding the Difficulty of Training Transformers

Liyuan Liu, Xiaodong Liu, Jianfeng Gao, Weizhu Chen and Jiawei Han

An Empirical Study of Generation Order for Machine Translation

William Chan, Mitchell Stern, Jamie Kiros and Jakob Uszkoreit

Inference Strategies for Machine Translation with Conditional Masking

Julia Kreutzer, George Foster and Colin Cherry

21:00–22:00 *Zoom Q&A Session 10iv: Question Answering*

AmbigQA: Answering Ambiguous Open-domain Questions

Sewon Min, Julian Michael, Hannaneh Hajishirzi and Luke Zettlemoyer

Tell Me How to Ask Again: Question Data Augmentation with Controllable Rewriting in Continuous Space

Dayiheng Liu, Yeyun Gong, Jie Fu, Yu Yan, Jiusheng Chen, Jiancheng Lv, Nan Duan and Ming Zhou

Training Question Answering Models From Synthetic Data

Raul Puri, Ryan Spring, Mohammad Shoeybi, Mostofa Patwary and Bryan Catanzaro

Few-Shot Complex Knowledge Base Question Answering via Meta Reinforcement Learning

Yuncheng Hua, Yuan-Fang Li, Gholamreza Haffari, Guilin Qi and Tongtong Wu

22:00–00:00 *Gather Session 4i: Computational Social Science and Social Media; Machine Translation and Multilinguality; Syntax: Tagging, Chunking, and Parsing*

Multilingual Offensive Language Identification with Cross-lingual Embeddings

Tharindu Ranasinghe and Marcos Zampieri

Tuesday, November 17, 2020 (continued)

Solving Historical Dictionary Codes with a Neural Language Model

Christopher Chu, Raphael Valenti and Kevin Knight

Toward Micro-Dialect Identification in Diaglossic and Code-Switched Environments

Muhammad Abdul-Mageed, Chiyu Zhang, AbdelRahim Elmadany and Lyle Ungar

Investigating African-American Vernacular English in Transformer-Based Text Generation

Sophie Groenwold, Lily Ou, Aesha Parekh, Samhita Honnavalli, Sharon Levy, Diba Mirza and William Yang Wang

Iterative Domain-Repaired Back-Translation

Hao-Ran Wei, Zhirui Zhang, Boxing Chen and Weihua Luo

Dynamic Data Selection and Weighting for Iterative Back-Translation

Zi-Yi Dou, Antonios Anastasopoulos and Graham Neubig

Revisiting Modularized Multilingual NMT to Meet Industrial Demands

Sungwon Lyu, Bokyung Son, Kichang Yang and Jaekyoung Bae

LAReQA: Language-Agnostic Answer Retrieval from a Multilingual Pool

Uma Roy, Noah Constant, Rami Al-Rfou, Aditya Barua, Aaron Phillips and Yinfei Yang

OCR Post Correction for Endangered Language Texts

Shruti Rijhwani, Antonios Anastasopoulos and Graham Neubig

X-FACTR: Multilingual Factual Knowledge Retrieval from Pretrained Language Models

Zhengbao Jiang, Antonios Anastasopoulos, Jun Araki, Haibo Ding and Graham Neubig

CCAligned: A Massive Collection of Cross-Lingual Web-Document Pairs

Ahmed El-Kishky, Vishrav Chaudhary, Francisco Guzmán and Philipp Koehn

Localizing Open-Ontology QA Semantic Parsers in a Day Using Machine Translation

Mehrad Moradshahi, Giovanni Campagna, Sina Semnani, Silei Xu and Monica Lam

Interactive Refinement of Cross-Lingual Word Embeddings

Michelle Yuan, Mozhi Zhang, Benjamin Van Durme, Leah Findlater and Jordan Boyd-Graber

Tuesday, November 17, 2020 (continued)

Exploiting Sentence Order in Document Alignment

Brian Thompson and Philipp Koehn

XGLUE: A New Benchmark Dataset for Cross-lingual Pre-training, Understanding and Generation

Yaobo Liang, Nan Duan, Yeyun Gong, Ning Wu, Fenfei Guo, Weizhen Qi, Ming Gong, Linjun Shou, Daxin Jiang, Guihong Cao, Xiaodong Fan, Ruofei Zhang, Rahul Agrawal, Edward Cui, Sining Wei, Taroon Bharti, Ying Qiao, Jiun-Hung Chen, Winnie Wu, Shuguang Liu, Fan Yang, Daniel Campos, Rangan Majumder and Ming Zhou

AIN: Fast and Accurate Sequence Labeling with Approximate Inference Network

Xinyu Wang, Yong Jiang, Nguyen Bach, Tao Wang, Zhongqiang Huang, Fei Huang and Kewei Tu

HIT: Nested Named Entity Recognition via Head-Tail Pair and Token Interaction

Yu Wang, Yun Li, Hanghang Tong and Ziyi Zhu

Supertagging Combinatory Categorical Grammar with Attentive Graph Convolutional Networks

Yuanhe Tian, Yan Song and Fei Xia

DAGA: Data Augmentation with a Generation Approach for Low-resource Tagging Tasks

BOSHENG DING, Linlin Liu, Lidong Bing, Canasai Kruengkrai, Thien Hai Nguyen, Shafiq Joty, Luo Si and Chunyan Miao

Interpretable Multi-dataset Evaluation for Named Entity Recognition

Jinlan Fu, Pengfei Liu and Graham Neubig

Adversarial Semantic Decoupling for Recognizing Open-Vocabulary Slots

Yuanmeng Yan, Keqing He, Hong Xu, Sihong Liu, Fanyu Meng, Min Hu and Weiran XU

22:00–00:00 *Gather Session 4ii: Machine Learning for NLP; Semantics: Lexical Semantics; Summarization*

Plug and Play Autoencoders for Conditional Text Generation

Florian Mai, Nikolaos Pappas, Ivan Montero, Noah A. Smith and James Henderson

Structure Aware Negative Sampling in Knowledge Graphs

Kian Ahrabian, Aarash Feizi, Yasmin Salehi, William L. Hamilton and Avishek Joey Bose

Neural Mask Generator: Learning to Generate Adaptive Word Maskings for Language Model Adaptation

Minki Kang, Moon-su Han and Sung Ju Hwang

Tuesday, November 17, 2020 (continued)

Autoregressive Knowledge Distillation through Imitation Learning

Alexander Lin, Jeremy Wohlwend, Howard Chen and Tao Lei

T3: Tree-Autoencoder Constrained Adversarial Text Generation for Targeted Attack

Boxin Wang, Hengzhi Pei, Boyuan Pan, Qian Chen, Shuohang Wang and Bo Li

Structured Pruning of Large Language Models

Ziheng Wang, Jeremy Wohlwend and Tao Lei

Effective Unsupervised Domain Adaptation with Adversarially Trained Language Models

Thuy-Trang Vu, Dinh Phung and Gholamreza Haffari

BAE: BERT-based Adversarial Examples for Text Classification

Siddhant Garg and Goutham Ramakrishnan

Adversarial Self-Supervised Data-Free Distillation for Text Classification

Xinyin Ma, Yongliang Shen, Gongfan Fang, Chen Chen, Chenghao Jia and Weiming Lu

BERT-ATTACK: Adversarial Attack Against BERT Using BERT

Linyang Li, Ruotian Ma, Qipeng Guo, Xiangyang Xue and Xipeng Qiu

The Thieves on Sesame Street are Polyglots - Extracting Multilingual Models from Monolingual APIs

Nitish Shirish Keskar, Bryan McCann, Caiming Xiong and Richard Socher

When Hearst Is not Enough: Improving Hypernymy Detection from Corpus with Distributional Models

Changlong Yu, Jialong Han, Peifeng Wang, Yangqiu Song, Hongming Zhang, Wilfred Ng and Shuming Shi

Interpreting Open-Domain Modifiers: Decomposition of Wikipedia Categories into Disambiguated Property-Value Pairs

Marius Pasca

A Synset Relation-enhanced Framework with a Try-again Mechanism for Word Sense Disambiguation

Ming Wang and Yinglin Wang

Diverse, Controllable, and Keyphrase-Aware: A Corpus and Method for News Multi-Headline Generation

Dayiheng Liu, Yeyun Gong, Yu Yan, Jie Fu, Bo Shao, Daxin Jiang, Jiancheng Lv and Nan Duan

Tuesday, November 17, 2020 (continued)

Factual Error Correction for Abstractive Summarization Models

Meng Cao, Yue Dong, Jiapeng Wu and Jackie Chi Kit Cheung

Compressive Summarization with Plausibility and Saliency Modeling

Shrey Desai, Jiacheng Xu and Greg Durrett

Understanding Neural Abstractive Summarization Models via Uncertainty

Jiacheng Xu, Shrey Desai and Greg Durrett

Better Highlighting: Creating Sub-Sentence Summary Highlights

Sangwoo Cho, Kaiqiang Song, Chen Li, Dong Yu, Hassan Foroosh and Fei Liu

Summarizing Text on Any Aspects: A Knowledge-Informed Weakly-Supervised Approach

Bowen Tan, Lianhui Qin, Eric Xing and Zhiting Hu

22:00–00:00 *Gather Session 4iii: Discourse and Pragmatics; Information Extraction; Language Generation*

BERT-enhanced Relational Sentence Ordering Network

Baiyun Cui, Yingming Li and Zhongfei Zhang

Online Conversation Disentanglement with Pointer Networks

Tao Yu and Shafiq Joty

VCDM: Leveraging Variational Bi-encoding and Deep Contextualized Word Representations for Improved Definition Modeling

Machel Reid, Edison Marrese-Taylor and Yutaka Matsuo

Coarse-to-Fine Pre-training for Named Entity Recognition

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

Exploring and Evaluating Attributes, Values, and Structures for Entity Alignment

Zhiyuan Liu, Yixin Cao, Liangming Pan, Juanzi Li, Zhiyuan Liu and Tat-Seng Chua

Simple and Effective Few-Shot Named Entity Recognition with Structured Nearest Neighbor Learning

Yi Yang and Arzoo Katiyar

Tuesday, November 17, 2020 (continued)

Learning Structured Representations of Entity Names using ActiveLearning and Weak Supervision

Kun Qian, Poornima Chozhiyath Raman, Yunyao Li and Lucian Popa

Entity Enhanced BERT Pre-training for Chinese NER

Chen Jia, Yuefeng Shi, Qinrong Yang and Yue Zhang

Scalable Zero-shot Entity Linking with Dense Entity Retrieval

Ledell Wu, Fabio Petroni, Martin Josifoski, Sebastian Riedel and Luke Zettlemoyer

A Dataset for Tracking Entities in Open Domain Procedural Text

Niket Tandon, Keisuke Sakaguchi, Bhavana Dalvi, Dheeraj Rajagopal, Peter Clark, Michal Guerquin, Kyle Richardson and Eduard Hovy

Design Challenges in Low-resource Cross-lingual Entity Linking

Xingyu Fu, Weijia Shi, Xiaodong Yu, Zian Zhao and Dan Roth

Efficient One-Pass End-to-End Entity Linking for Questions

Belinda Z. Li, Sewon Min, Srinivasan Iyer, Yashar Mehdad and Wen-tau Yih

LUKE: Deep Contextualized Entity Representations with Entity-aware Self-attention

Ikuya Yamada, Akari Asai, Hiroyuki Shindo, Hideaki Takeda and Yuji Matsumoto

Generating similes effortlessly like a Pro: A Style Transfer Approach for Simile Generation

Tuhin Chakrabarty, Smaranda Muresan and Nanyun Peng

STORIUM: A Dataset and Evaluation Platform for Machine-in-the-Loop Story Generation

Nader Akoury, Shufan Wang, Josh Whiting, Stephen Hood, Nanyun Peng and Mohit Iyyer

Substance over Style: Document-Level Targeted Content Transfer

Allison Hegel, Sudha Rao, Asli Celikyilmaz and Bill Dolan

Template Guided Text Generation for Task-Oriented Dialogue

Mihir Kale and Abhinav Rastogi

MOCHA: A Dataset for Training and Evaluating Generative Reading Comprehension Metrics

Anthony Chen, Gabriel Stanovsky, Sameer Singh and Matt Gardner

Tuesday, November 17, 2020 (continued)

Plan ahead: Self-Supervised Text Planning for Paragraph Completion Task

Dongyeop Kang and Eduard Hovy

Inquisitive Question Generation for High Level Text Comprehension

Wei-Jen Ko, TE-YUAN CHEN, Yiyan Huang, Greg Durrett and Junyi Jessy Li

22:00–00:00 *Gather Session 4iv: Dialog and Interactive Systems; NLP Applications; Question Answering*

Towards Persona-Based Empathetic Conversational Models

Peixiang Zhong, Chen Zhang, Hao Wang, Yong Liu and Chunyan Miao

Personal Information Leakage Detection in Conversations

Qiongfai Xu, Lizhen Qu, Zeyu Gao and Gholamreza Haffari

Response Selection for Multi-Party Conversations with Dynamic Topic Tracking

Weishi Wang, Steven C.H. Hoi and Shafiq Joty

Regularizing Dialogue Generation by Imitating Implicit Scenarios

Shaoxiong Feng, Xuancheng Ren, Hongshen Chen, Bin Sun, Kan Li and Xu SUN

MovieChats: Chat like Humans in a Closed Domain

Hui Su, Xiaoyu Shen, Zhou Xiao, Zheng Zhang, Ernie Chang, Cheng Zhang, Cheng Niu and Jie Zhou

Conundrums in Entity Coreference Resolution: Making Sense of the State of the Art

Jing Lu and Vincent Ng

Semantic Role Labeling Guided Multi-turn Dialogue ReWriter

Kun Xu, Haochen Tan, Linfeng Song, Han Wu, Haisong Zhang, Linqi Song and Dong Yu

Continuity of Topic, Interaction, and Query: Learning to Quote in Online Conversations

Lingzhi Wang, Jing Li, Xingshan Zeng, Haisong Zhang and Kam-Fai Wong

Profile Consistency Identification for Open-domain Dialogue Agents

Haoyu Song, Yan Wang, Wei-Nan Zhang, Zhengyu Zhao, Ting Liu and Xiaojiang Liu

Tuesday, November 17, 2020 (continued)

An Element-aware Multi-representation Model for Law Article Prediction

Huilin Zhong, Junsheng Zhou, Weiguang QU, Yunfei Long and Yanhui Gu

Recurrent Event Network: Autoregressive Structure Inference over Temporal Knowledge Graphs

Woojeong Jin, Meng Qu, Xisen Jin and Xiang Ren

Multi-resolution Annotations for Emoji Prediction

Weicheng Ma, Ruibo Liu, Lili Wang and Soroush Vosoughi

Less is More: Attention Supervision with Counterfactuals for Text Classification

Seungtaek Choi, Haeju Park, Jinyoung Yeo and Seung-won Hwang

MODE-LSTM: A Parameter-efficient Recurrent Network with Multi-Scale for Sentence Classification

Qianli Ma, Zhenxi Lin, Jiangyue Yan, Zipeng Chen and Liuhong Yu

HSCNN: A Hybrid-Siamese Convolutional Neural Network for Extremely Imbalanced Multi-label Text Classification

Wenshuo Yang, Jiyi Li, Fumiyo Fukumoto and Yanming Ye

Multi-Stage Pre-training for Automated Chinese Essay Scoring

Wei Song, Kai Zhang, Ruiji Fu, Lizhen Liu, Ting Liu and Miaomiao Cheng

Multi-hop Inference for Question-driven Summarization

Yang Deng, Wenxuan Zhang and Wai Lam

Towards Interpretable Reasoning over Paragraph Effects in Situation

Mucheng Ren, Xiubo Geng, Tao QIN, Heyan Huang and Daxin Jiang

Question Directed Graph Attention Network for Numerical Reasoning over Text

Kunlong Chen, Weidi Xu, Xingyi Cheng, Zou Xiaochuan, Yuyu Zhang, Le Song, Taifeng Wang, Yuan Qi and Wei Chu

Dense Passage Retrieval for Open-Domain Question Answering

Vladimir Karpukhin, Barlas Oguz, Sewon Min, Patrick Lewis, Ledell Wu, Sergey Edunov, Danqi Chen and Wen-tau Yih

Distilling Structured Knowledge for Text-Based Relational Reasoning

Jin Dong, Marc-Antoine Rondeau and William L. Hamilton

Tuesday, November 17, 2020 (continued)

22:00–00:00 *Gather Session 4v: Interpretability and Analysis of Models for NLP; Semantics: Sentence-level Semantics, Textual Inference and Other areas; Sentiment Analysis, Stylistic Analysis, and Argument Mining*

Asking without Telling: Exploring Latent Ontologies in Contextual Representations
Julian Michael, Jan A. Botha and Ian Tenney

Pretrained Language Model Embryology: The Birth of ALBERT
Cheng-Han Chiang, Sung-Feng Huang and Hung-yi Lee

Learning Music Helps You Read: Using Transfer to Study Linguistic Structure in Language Models
Isabel Papadimitriou and Dan Jurafsky

What Do Position Embeddings Learn? An Empirical Study of Pre-Trained Language Model Positional Encoding
Yu-An Wang and Yun-Nung Chen

“You are grounded!”: Latent Name Artifacts in Pre-trained Language Models
Vered Shwartz, Rachel Rudinger and Oyvind Tafjord

Birds have four legs?! NumerSense: Probing Numerical Commonsense Knowledge of Pre-Trained Language Models
Bill Yuchen Lin, Seyeon Lee, Rahul Khanna and Xiang Ren

Grounded Adaptation for Zero-shot Executable Semantic Parsing
Victor Zhong, Mike Lewis, Sida I. Wang and Luke Zettlemoyer

An Imitation Game for Learning Semantic Parsers from User Interaction
Ziyu Yao, Yiqi Tang, Wen-tau Yih, Huan Sun and Yu Su

IGSQL: Database Schema Interaction Graph Based Neural Model for Context-Dependent Text-to-SQL Generation
Yitao Cai and Xiaojun Wan

“What Do You Mean by That?” A Parser-Independent Interactive Approach for Enhancing Text-to-SQL
Yuntao Li, Bei Chen, Qian Liu, Yan Gao, Jian-Guang LOU, Yan Zhang and Dongmei Zhang

DuSQL: A Large-Scale and Pragmatic Chinese Text-to-SQL Dataset
Lijie Wang, Ao Zhang, Kun Wu, Ke Sun, Zhenghua Li, Hua Wu, Min Zhang and Haifeng Wang

Tuesday, November 17, 2020 (continued)

Mention Extraction and Linking for SQL Query Generation

Jianqiang Ma, ZEYU YAN, Shuai Pang, Yang Zhang and Jianping Shen

Re-examining the Role of Schema Linking in Text-to-SQL

Wenqiang Lei, Weixin Wang, Zhixin MA, Tian Gan, Wei Lu, Min-Yen Kan and Tat-Seng Chua

A Multi-Task Incremental Learning Framework with Category Name Embedding for Aspect-Category Sentiment Analysis

Zehui Dai, Cheng Peng, Huajie Chen and Yadong Ding

Train No Evil: Selective Masking for Task-Guided Pre-Training

Yuxian Gu, Zhengyan Zhang, Xiaozhi Wang, Zhiyuan Liu and Maosong Sun

SentiLARE: Sentiment-Aware Language Representation Learning with Linguistic Knowledge

Pei Ke, Haozhe Ji, Siyang Liu, Xiaoyan Zhu and Minlie Huang

Weakly-Supervised Aspect-Based Sentiment Analysis via Joint Aspect-Sentiment Topic Embedding

Jiaxin Huang, Yu Meng, Fang Guo, Heng Ji and Jiawei Han

APE: Argument Pair Extraction from Peer Review and Rebuttal via Multi-task Learning

Liyang Cheng, Lidong Bing, Qian Yu, Wei Lu and Luo Si

Diversified Multiple Instance Learning for Document-Level Multi-Aspect Sentiment Classification

Yunjie Ji, Hao Liu, Bolei He, Xinyan Xiao, Hua Wu and Yanhua Yu

Identifying Exaggerated Language

Li Kong, Chuanyi Li, Jidong Ge, Bin Luo and Vincent Ng

Unified Feature and Instance Based Domain Adaptation for Aspect-Based Sentiment Analysis

Chenggong Gong, Jianfei Yu and Rui Xia

Wednesday, November 18, 2020

04:00–05:00 *Zoom Q&A Session II*

04:00–05:00 *Zoom Q&A Session III: Interpretability and Analysis of Models for NLP*

Compositional and Lexical Semantics in RoBERTa, BERT and DistilBERT: A Case Study on CoQA

Ieva Staliūnaitė and Ignacio Iacobacci

Attention is Not Only a Weight: Analyzing Transformers with Vector Norms

Goro Kobayashi, Tatsuki Kuribayashi, Sho Yokoi and Kentaro Inui

F1 is Not Enough! Models and Evaluation Towards User-Centered Explainable Question Answering

Hendrik Schuff, Heike Adel and Ngoc Thang Vu

On the Ability and Limitations of Transformers to Recognize Formal Languages

Satwik Bhattamishra, Kabir Ahuja and Navin Goyal

04:00–05:00 *Zoom Q&A Session III: NLP Applications*

An Unsupervised Joint System for Text Generation from Knowledge Graphs and Semantic Parsing

Martin Schmitt, Sahand Sharifzadeh, Volker Tresp and Hinrich Schütze

DGST: a Dual-Generator Network for Text Style Transfer

Xiao Li, Guanyi Chen, Chenghua Lin and Ruizhe Li

A Knowledge-Aware Sequence-to-Tree Network for Math Word Problem Solving

Qinzhao Wu, Qi Zhang, Jinlan Fu and Xuanjing Huang

Generating Fact Checking Briefs

Angela Fan, Aleksandra Piktus, Fabio Petroni, Guillaume Wenzek, Marzieh Saeidi, Andreas Vlachos, Antoine Bordes and Sebastian Riedel

Improving the Efficiency of Grammatical Error Correction with Erroneous Span Detection and Correction

Mengyun Chen, Tao Ge, Xingxing Zhang, Furu Wei and Ming Zhou

Wednesday, November 18, 2020 (continued)

04:00–05:00 *Zoom Q&A Session 11iii: Question Answering*

Coreferential Reasoning Learning for Language Representation

Deming Ye, Yankai Lin, Jiaju Du, Zhenghao Liu, Peng Li, Maosong Sun and Zhiyuan Liu

Is Graph Structure Necessary for Multi-hop Question Answering?

Nan Shao, Yiming Cui, Ting Liu, Shijin Wang and Guoping Hu

04:00–05:00 *Zoom Q&A Session 11iv: Semantics: Lexical Semantics*

XL-WiC: A Multilingual Benchmark for Evaluating Semantic Contextualization

Alessandro Raganato, Tommaso Pasini, Jose Camacho-Collados and Mohammad Taher Pilehvar

Generational or "How We Went beyond Word Sense Inventories and Learned to Gloss"

Michele Bevilacqua, Marco Maru and Roberto Navigli

Probing Pretrained Language Models for Lexical Semantics

Ivan Vulić, Edoardo Maria Ponti, Robert Litschko, Goran Glavaš and Anna Korhonen

05:00–06:00 *Zoom Q&A Session 12*

05:00–06:00 *Zoom Q&A Session 12i: Dialog and Interactive Systems*

Cross-lingual Spoken Language Understanding with Regularized Representation Alignment

Zihan Liu, Genta Indra Winata, Peng Xu, Zhaojiang Lin and Pascale Fung

SLURP: A Spoken Language Understanding Resource Package

Emanuele Bastianelli, Andrea Vanzo, Pawel Swietojanski and Verena Rieser

Neural Conversational QA: Learning to Reason vs Exploiting Patterns

Nikhil Verma, Abhishek Sharma, Dhiraj Madan, Danish Contractor, Harshit Kumar and Sachindra Joshi

05:00–06:00 *Zoom Q&A Session 12ii: Information Extraction*

Wednesday, November 18, 2020 (continued)

Counterfactual Generator: A Weakly-Supervised Method for Named Entity Recognition

Xiangji Zeng, Yunliang Li, Yuchen Zhai and Yin Zhang

Understanding Procedural Text using Interactive Entity Networks

Jizhi Tang, Yansong Feng and Dongyan Zhao

A Rigorous Study on Named Entity Recognition: Can Fine-tuning Pretrained Model Lead to the Promised Land?

Hongyu Lin, Yaojie Lu, Jialong Tang, Xianpei Han, Le Sun, Zhicheng Wei and Nicholas Jing Yuan

05:00–06:00 *Zoom Q&A Session 12iii: Machine Learning for NLP*

DyERNIE: Dynamic Evolution of Riemannian Manifold Embeddings for Temporal Knowledge Graph Completion

Zhen Han, Peng Chen, Yunpu Ma and Volker Tresp

Embedding Words in Non-Vector Space with Unsupervised Graph Learning

Max Ryabinin, Sergei Popov, Liudmila Prokhorenkova and Elena Voita

Debiasing knowledge graph embeddings

Joseph Fisher, Arpit Mittal, Dave Palfrey and Christos Christodoulopoulos

Message Passing for Hyper-Relational Knowledge Graphs

Mikhail Galkin, Priyansh Trivedi, Gaurav Maheshwari, Ricardo Usbeck and Jens Lehmann

05:00–06:00 *Zoom Q&A Session 12iv: Sentiment Analysis, Stylistic Analysis, and Argument Mining*

Relation-aware Graph Attention Networks with Relational Position Encodings for Emotion Recognition in Conversations

Taichi Ishiwatari, Yuki Yasuda, Taro Miyazaki and Jun Goto

BERT Knows Punta Cana is not just beautiful, it's gorgeous: Ranking Scalar Adjectives with Contextualised Representations

Aina Garí Soler and Marianna Apidianaki

Feature Adaptation of Pre-Trained Language Models across Languages and Domains with Robust Self-Training

Hai Ye, Qingyu Tan, Ruidan He, Juntao Li, Hwee Tou Ng and Lidong Bing

Wednesday, November 18, 2020 (continued)

Textual Data Augmentation for Efficient Active Learning on Tiny Datasets

Husam Quteineh, Spyridon Samothrakis and Richard Sutcliffe

11:00–12:00 *Keynote III: Janet B. Pierrehumbert*

12:00–13:00 *Zoom Q&A Session 13*

12:00–13:00 *Zoom Q&A Session 13i: Discourse and Pragmatics*

"I'd rather just go to bed": Understanding Indirect Answers

Annie Louis, Dan Roth and Filip Radlinski

PowerTransformer: Unsupervised Controllable Revision for Biased Language Correction

Xinyao Ma, Maarten Sap, Hannah Rashkin and Yejin Choi

MEGA RST Discourse Treebanks with Structure and Nuclearity from Scalable Distant Sentiment Supervision

Patrick Huber and Giuseppe Carenini

Centering-based Neural Coherence Modeling with Hierarchical Discourse Segments

Sungho Jeon and Michael Strube

Keeping Up Appearances: Computational Modeling of Face Acts in Persuasion Oriented Discussions

Ritam Dutt, Rishabh Joshi and Carolyn Rose

12:00–13:00 *Zoom Q&A Session 13ii: NLP Applications*

HABERTOR: An Efficient and Effective Deep Hatespeech Detector

Thanh Tran, Yifan Hu, Changwei Hu, Kevin Yen, Fei Tan, Kyumin Lee and Se Rim Park

An Empirical Study on Large-Scale Multi-Label Text Classification Including Few and Zero-Shot Labels

Ilias Chalkidis, Manos Fergadiotis, Sotiris Kotitsas, Prodromos Malakasiotis, Nikolaos Aletras and Ion Androutsopoulos

*Which *BERT? A Survey Organizing Contextualized Encoders*

Patrick Xia, Shijie Wu and Benjamin Van Durme

Wednesday, November 18, 2020 (continued)

Fact or Fiction: Verifying Scientific Claims

David Wadden, Shanchuan Lin, Kyle Lo, Lucy Lu Wang, Madeleine van Zuylen, Arman Cohan and Hannaneh Hajishirzi

12:00–13:00 *Zoom Q&A Session 13iii: Semantics: Sentence-level Semantics, Textual Inference and Other areas*

Semantic Role Labeling as Syntactic Dependency Parsing

Tianze Shi, Igor Malioutov and Ozan Irsoy

PARADE: A New Dataset for Paraphrase Identification Requiring Computer Science Domain Knowledge

Yun He, Zhuoer Wang, Yin Zhang, Ruihong Huang and James Caverlee

Causal Inference of Script Knowledge

Noah Weber, Rachel Rudinger and Benjamin Van Durme

Towards Debiasing NLU Models from Unknown Biases

Prasetya Ajie Utama, Nafise Sadat Moosavi and Iryna Gurevych

12:00–13:00 *Zoom Q&A Session 13iv: Syntax: Tagging, Chunking, and Parsing*

On the Role of Supervision in Unsupervised Constituency Parsing

Haoyue Shi, Karen Livescu and Kevin Gimpel

13:00–14:00 *Zoom Q&A Session 14*

13:00–14:00 *Zoom Q&A Session 14i: Machine Translation and Multilinguality*

Language Model Prior for Low-Resource Neural Machine Translation

Christos Baziotis, Barry Haddow and Alexandra Birch

Detecting Word Sense Disambiguation Biases in Machine Translation for Model-Agnostic Adversarial Attacks

Denis Emelin, Ivan Titov and Rico Sennrich

MAD-X: An Adapter-Based Framework for Multi-Task Cross-Lingual Transfer

Jonas Pfeiffer, Ivan Vulić, Iryna Gurevych and Sebastian Ruder

Wednesday, November 18, 2020 (continued)

Translation Artifacts in Cross-lingual Transfer Learning

Mikel Artetxe, Gorka Labaka and Eneko Agirre

13:00–14:00 *Zoom Q&A Session 14ii: Computational Social Science and Social Media*

A Time-Aware Transformer Based Model for Suicide Ideation Detection on Social Media

Ramit Sawhney, Harshit Joshi, Saumya Gandhi and Rajiv Ratn Shah

Weakly Supervised Learning of Nuanced Frames for Analyzing Polarization in News Media

Shamik Roy and Dan Goldwasser

Where Are the Facts? Searching for Fact-checked Information to Alleviate the Spread of Fake News

Nguyen Vo and Kyumin Lee

Fortifying Toxic Speech Detectors Against Veiled Toxicity

Xiaochuang Han and Yulia Tsvetkov

Explainable Automated Fact-Checking for Public Health Claims

Neema Kotonya and Francesca Toni

13:00–14:00 *Zoom Q&A Session 14iii: Machine Learning for NLP*

Interactive Fiction Game Playing as Multi-Paragraph Reading Comprehension with Reinforcement Learning

Xiaoxiao Guo, Mo Yu, Yupeng Gao, Chuang Gan, Murray Campbell and Shiyu Chang

DORB: Dynamically Optimizing Multiple Rewards with Bandits

Ramakanth Pasunuru, Han Guo and Mohit Bansal

13:00–14:00 *Zoom Q&A Session 14iv: Information Extraction*

MedFilter: Improving Extraction of Task-relevant Utterances through Integration of Discourse Structure and Ontological Knowledge

Sopan Khosla, Shikhar Vashishth, Jill Fain Lehman and Carolyn Rose

Wednesday, November 18, 2020 (continued)

Hierarchical Evidence Set Modeling for Automated Fact Extraction and Verification
Shyam Subramanian and Kyumin Lee

Program Enhanced Fact Verification with Verbalization and Graph Attention Network
Xiaoyu Yang, Feng Nie, Yufei Feng, Quan Liu, Zhigang Chen and Xiaodan Zhu

Constrained Fact Verification for FEVER
Adithya Pratapa, Sai Muralidhar Jayanthi and Kavya Nerella

Entity Linking in 100 Languages
Jan A. Botha, Zifei Shan and Daniel Gillick

14:00–16:00 *Gather Session 5i: Machine Learning for NLP; Speech and Multimodality; Summarization*

PatchBERT: Just-in-Time, Out-of-Vocabulary Patching
Sangwhan Moon and Naoaki Okazaki

On the importance of pre-training data volume for compact language models
Vincent Micheli, Martin d’Hoffschmidt and François Fleuret

BERT-of-Theseus: Compressing BERT by Progressive Module Replacing
Canwen Xu, Wangchunshu Zhou, Tao Ge, Furu Wei and Ming Zhou

Recall and Learn: Fine-tuning Deep Pretrained Language Models with Less Forgetting
Sanyuan Chen, Yutai Hou, Yiming Cui, Wanxiang Che, Ting Liu and Xiangzhan Yu

Exploring and Predicting Transferability across NLP Tasks
Tu Vu, Tong Wang, Tsendsuren Munkhdalai, Alessandro Sordani, Adam Trischler, Andrew Mattarella-Micke, Subhransu Maji and Mohit Iyyer

To BERT or Not to BERT: Comparing Task-specific and Task-agnostic Semi-Supervised Approaches for Sequence Tagging
Kasturi Bhattacharjee, Miguel Ballesteros, Rishita Anubhai, Smaranda Muresan, Jie Ma, Faisal Ladhak and Yaser Al-Onaizan

Cold-start Active Learning through Self-supervised Language Modeling
Michelle Yuan, Hsuan-Tien Lin and Jordan Boyd-Graber

Wednesday, November 18, 2020 (continued)

Active Learning for BERT: An Empirical Study

Liat Ein-Dor, Alon Halfon, Ariel Gera, Eyal Shnarch, Lena Dankin, Leshem Choshen, Marina Danilevsky, Ranit Aharonov, Yoav Katz and Noam Slonim

Transformer Based Multi-Source Domain Adaptation

Dustin Wright and Isabelle Augenstein

Vector-Vector-Matrix Architecture: A Novel Hardware-Aware Framework for Low-Latency Inference in NLP Applications

Matthew Houry, Rumén Dangovski, Longwu Ou, Preslav Nakov, Yichen Shen and Li Jing

The importance of fillers for text representations of speech transcripts

Tanvi Dinkar, Pierre Colombo, Matthieu Labeau and Chloé Clavel

The role of context in neural pitch accent detection in English

Elizabeth Nielsen, Mark Steedman and Sharon Goldwater

VOLTAGE: Volatility Forecasting via Text Audio Fusion with Graph Convolution Networks for Earnings Calls

Ramit Sawhney, Piyush Khanna, Arshiya Aggarwal, Taru Jain, Puneet Mathur and Rajiv Ratn Shah

Effectively pretraining a speech translation decoder with Machine Translation data

Ashkan Alinejad and Anoop Sarkar

A Preliminary Exploration of GANs for Keyphrase Generation

Avinash Swaminathan, Haimin Zhang, Debanjan Mahata, Rakesh Gosangi, Rajiv Ratn Shah and Amanda Stent

TESA: A Task in Entity Semantic Aggregation for Abstractive Summarization

Clément Jumel, Annie Louis and Jackie Chi Kit Cheung

MLSUM: The Multilingual Summarization Corpus

Thomas Scialom, Paul-Alexis Dray, Sylvain Lamprier, Benjamin Piwowarski and Jacopo Staiano

Multi-XScience: A Large-scale Dataset for Extreme Multi-document Summarization of Scientific Articles

Yao Lu, Yue Dong and Laurent Charlin

Intrinsic Evaluation of Summarization Datasets

Rishi Bommasani and Claire Cardie

Wednesday, November 18, 2020 (continued)

14:00–16:00 *Gather Session 5ii: Dialog and Interactive Systems; Semantics: Sentence-level Semantics, Textual Inference and Other areas*

Iterative Feature Mining for Constraint-Based Data Collection to Increase Data Diversity and Model Robustness

Stefan Larson, Anthony Zheng, Anish Mahendran, Rishi Tekriwal, Adrian Cheung, Eric Guldan, Kevin Leach and Jonathan K. Kummerfeld

Conversational Semantic Parsing for Dialog State Tracking

Jianpeng Cheng, Devang Agrawal, Héctor Martínez Alonso, Shruti Bhargava, Joris Driesen, Federico Flego, Dain Kaplan, Dimitri Kartsaklis, Lin Li, Dhivya Piravipermal, Jason D Williams, Hong Yu, Diarmuid Ó Séaghdha and Anders Johannsen

doc2dial: A Goal-Oriented Document-Grounded Dialogue Dataset

Song Feng, Hui Wan, Chulaka Gunasekara, Siva Patel, Sachindra Joshi and Luis Lastras

Interview: Large-scale Modeling of Media Dialog with Discourse Patterns and Knowledge Grounding

Bodhisattwa Prasad Majumder, Shuyang Li, Jianmo Ni and Julian McAuley

INSPIRED: Toward Sociable Recommendation Dialog Systems

Shirley Anugrah Hayati, Dongyeop Kang, Qingxiaoyang Zhu, Weiyan Shi and Zhou Yu

Information Seeking in the Spirit of Learning: A Dataset for Conversational Curiosity

Pedro Rodriguez, Paul Crook, Seungwhan Moon and Zhiguang Wang

Queens are Powerful too: Mitigating Gender Bias in Dialogue Generation

Emily Dinan, Angela Fan, Adina Williams, Jack Urbanek, Douwe Kiela and Jason Weston

Discriminatively-Tuned Generative Classifiers for Robust Natural Language Inference

Xiaoan Ding, Tianyu Liu, Baobao Chang, Zhifang Sui and Kevin Gimpel

New Protocols and Negative Results for Textual Entailment Data Collection

Samuel R. Bowman, Jennimaria Palomaki, Livio Baldini Soares and Emily Pitler

The Curse of Performance Instability in Analysis Datasets: Consequences, Source, and Suggestions

Xiang Zhou, Yixin Nie, Hao Tan and Mohit Bansal

Universal Natural Language Processing with Limited Annotations: Try Few-shot Textual Entailment as a Start

Wenpeng Yin, Nazneen Fatema Rajani, Dragomir Radev, Richard Socher and Caiming Xiong

Wednesday, November 18, 2020 (continued)

ConjNLI: Natural Language Inference Over Conjunctive Sentences

Swarnadeep Saha, Yixin Nie and Mohit Bansal

Data and Representation for Turkish Natural Language Inference

Emrah Budur, Rıza Özçelik, Tunga Gungor and Christopher Potts

Multitask Learning for Cross-Lingual Transfer of Broad-coverage Semantic Dependencies

Maryam Aminian, Mohammad Sadegh Rasooli and Mona Diab

Precise Task Formalization Matters in Winograd Schema Evaluations

Haokun Liu, William Huang, Dhara Mungra and Samuel R. Bowman

Avoiding the Hypothesis-Only Bias in Natural Language Inference via Ensemble Adversarial Training

Joe Stacey, Pasquale Minervini, Haim Dubossarsky, Sebastian Riedel and Tim Rocktäschel

14:00–16:00 *Gather Session 5iii: Information Retrieval and Text Mining; NLP Applications; Semantics: Lexical Semantics*

SynSetExpan: An Iterative Framework for Joint Entity Set Expansion and Synonym Discovery

Jiaming Shen, Wenda Qiu, Jingbo Shang, Michelle Vanni, Xiang Ren and Jiawei Han

Evaluating the Calibration of Knowledge Graph Embeddings for Trustworthy Link Prediction

Tara Safavi, Danai Koutra and Edgar Meij

Text Graph Transformer for Document Classification

Haopeng Zhang and Jiawei Zhang

CoDEX: A Comprehensive Knowledge Graph Completion Benchmark

Tara Safavi and Danai Koutra

META: Metadata-Empowered Weak Supervision for Text Classification

Dheeraj Mekala, Xinyang Zhang and Jingbo Shang

Towards More Accurate Uncertainty Estimation In Text Classification

Jianfeng He, Xuchao Zhang, Shuo Lei, Zhiqian Chen, Fanglan Chen, Abdulaziz Alhamadani, Bei Xiao and ChangTien Lu

Wednesday, November 18, 2020 (continued)

Chapter Captor: Text Segmentation in Novels

Charuta Pethe, Allen Kim and Steve Skiena

Authorship Attribution for Neural Text Generation

Adaku Uchendu, Thai Le, Kai Shu and Dongwon Lee

NwQM: A neural quality assessment framework for Wikipedia

Bhanu Prakash Reddy Guda, Sasi Bhushan Seelaboyina, Soumya Sarkar and Animesh Mukherjee

Towards Modeling Revision Requirements in wikiHow Instructions

Irshad Bhat, Talita Anthonio and Michael Roth

Deep Attentive Learning for Stock Movement Prediction From Social Media Text and Company Correlations

Ramit Sawhney, Shivam Agarwal, Arnav Wadhwa and Rajiv Ratn Shah

Natural Language Processing for Achieving Sustainable Development: the Case of Neural Labelling to Enhance Community Profiling

Costanza Conforti, Stephanie Hirmer, Dai Morgan, Marco Basaldella and Yau Ben Or

To Schedule or not to Schedule: Extracting Task Specific Temporal Entities and Associated Negation Constraints

Barun Patra, Chala Fufa, Pamela Bhattacharya and Charles Lee

Competence-Level Prediction and Resume & Job Description Matching Using Context-Aware Transformer Models

Changmao Li, Elaine Fisher, Rebecca Thomas, Steve Pittard, Vicki Hertzberg and Jinho D. Choi

Grammatical Error Correction in Low Error Density Domains: A New Benchmark and Analyses

Simon Flachs, Ophélie Lacroix, Helen Yannakoudakis, Marek Rei and Anders Søgaard

Deconstructing word embedding algorithms

Kian Kenyon-Dean, Edward Newell and Jackie Chi Kit Cheung

Sequential Modelling of the Evolution of Word Representations for Semantic Change Detection

Adam Tsakalidis and Maria Liakata

Sparsity Makes Sense: Word Sense Disambiguation Using Sparse Contextualized Word Representations

Gábor Berend

Wednesday, November 18, 2020 (continued)

Exploring Semantic Capacity of Terms

Jie Huang, Zilong Wang, Kevin Chang, Wen-mei Hwu and JinJun Xiong

14:00–16:00 *Gather Session 5iv: Discourse and Pragmatics; Information Extraction; Language Generation*

Learning to Ignore: Long Document Coreference with Bounded Memory Neural Networks

Shubham Toshniwal, Sam Wiseman, Allyson Ettinger, Karen Livescu and Kevin Gimpel

Revealing the Myth of Higher-Order Inference in Coreference Resolution

Liyan Xu and Jinho D. Choi

Pre-training Mention Representations in Coreference Models

Yuval Varkel and Amir Globerson

Learning Collaborative Agents with Rule Guidance for Knowledge Graph Reasoning

Deren Lei, Gangrong Jiang, Xiaotao Gu, Kexuan Sun, Yuning Mao and Xiang Ren

Exploring Contextualized Neural Language Models for Temporal Dependency Parsing

Hayley Ross, Jonathon Cai and Bonan Min

Systematic Comparison of Neural Architectures and Training Approaches for Open Information Extraction

Patrick Hohenecker, Frank Mtumbuka, Vid Kocijan and Thomas Lukasiewicz

SeqMix: Augmenting Active Sequence Labeling via Sequence Mixup

Rongzhi Zhang, Yue Yu and Chao Zhang

AxCell: Automatic Extraction of Results from Machine Learning Papers

Marcin Kardas, Piotr Czapla, Pontus Stenetorp, Sebastian Ruder, Sebastian Riedel, Ross Taylor and Robert Stojnic

Knowledge-guided Open Attribute Value Extraction with Reinforcement Learning

Ye Liu, Sheng Zhang, Rui Song, Suo Feng and Yanghua Xiao

DualTKB: A Dual Learning Bridge between Text and Knowledge Base

Pierre Dognin, Igor Melnyk, Inkit Padhi, Cicero Nogueira dos Santos and Payel Das

Wednesday, November 18, 2020 (continued)

Incremental Neural Coreference Resolution in Constant Memory

Patrick Xia, João Sedoc and Benjamin Van Durme

Improving Low Compute Language Modeling with In-Domain Embedding Initialization

Charles Welch, Rada Mihalcea and Jonathan K. Kummerfeld

KGPT: Knowledge-Grounded Pre-Training for Data-to-Text Generation

Wenhu Chen, Yu Su, Xifeng Yan and William Yang Wang

POINTER: Constrained Progressive Text Generation via Insertion-based Generative Pre-training

Yizhe Zhang, Guoyin Wang, Chunyuan Li, Zhe Gan, Chris Brockett and Bill Dolan

Unsupervised Text Style Transfer with Padded Masked Language Models

Eric Malmi, Aliaksei Severyn and Sascha Rothe

PALM: Pre-training an Autoencoding&Autoregressive Language Model for Context-conditioned Generation

Bin Bi, Chenliang Li, Chen Wu, Ming Yan, Wei Wang, Songfang Huang, Fei Huang and Luo Si

Gradient-guided Unsupervised Lexically Constrained Text Generation

Lei Sha

TeaForN: Teacher-Forcing with N-grams

Sebastian Goodman, Nan Ding and Radu Soricut

14:00–16:00 *Gather Session 5v: Language Grounding to Vision, Robotics and Beyond; Question Answering; Sentiment Analysis, Stylistic Analysis, and Argument Mining*

Experience Grounds Language

Yonatan Bisk, Ari Holtzman, Jesse Thomason, Jacob Andreas, Yoshua Bengio, Joyce Chai, Mirella Lapata, Angeliki Lazaridou, Jonathan May, Aleksandr Nisnevich, Nicolas Pinto and Joseph Turian

Keep CALM and Explore: Language Models for Action Generation in Text-based Games

Shunyu Yao, Rohan Rao, Matthew Hausknecht and Karthik Narasimhan

CapWAP: Image Captioning with a Purpose

Adam Fisch, Kenton Lee, Ming-Wei Chang, Jonathan Clark and Regina Barzilay

Wednesday, November 18, 2020 (continued)

What is More Likely to Happen Next? Video-and-Language Future Event Prediction
Jie Lei, Licheng Yu, Tamara Berg and Mohit Bansal

X-LXMERT: Paint, Caption and Answer Questions with Multi-Modal Transformers
Jaemin Cho, jiasen lu, Dustin Schwenk, Hannaneh Hajishirzi and Aniruddha Kembhavi

Towards Understanding Sample Variance in Visually Grounded Language Generation: Evaluations and Observations
Wanrong Zhu, Xin Wang, Pradyumna Narayana, Kazoo Sone, Sugato Basu and William Yang Wang

Beyond Instructional Videos: Probing for More Diverse Visual-Textual Grounding on YouTube
Jack Hessel, Zhenhai Zhu, Bo Pang and Radu Soricut

Hierarchical Graph Network for Multi-hop Question Answering
Yuwei Fang, Siqi Sun, Zhe Gan, Rohit Pillai, Shuohang Wang and Jingjing Liu

A Simple Yet Strong Pipeline for HotpotQA
Dirk Groeneveld, Tushar Khot, Mausam and Ashish Sabharwal

Is Multihop QA in DiRe Condition? Measuring and Reducing Disconnected Reasoning
Harsh Trivedi, Niranjan Balasubramanian, Tushar Khot and Ashish Sabharwal

Unsupervised Question Decomposition for Question Answering
Ethan Perez, Patrick Lewis, Wen-tau Yih, Kyunghyun Cho and Douwe Kiela

SRLGRN: Semantic Role Labeling Graph Reasoning Network
Chen Zheng and Parisa Kordjamshidi

CancerEmo: A Dataset for Fine-Grained Emotion Detection
Tiberiu Sosea and Cornelia Caragea

Exploring the Role of Argument Structure in Online Debate Persuasion
Jialu Li, Esin Durmus and Claire Cardie

Zero-Shot Stance Detection: A Dataset and Model using Generalized Topic Representations
Emily Allaway and Kathleen McKeown

Wednesday, November 18, 2020 (continued)

Sentiment Analysis of Tweets using Heterogeneous Multi-layer Network Representation and Embedding

Loitongbam Gyanendro Singh, Anasua Mitra and Sanasam Ranbir Singh

Introducing Syntactic Structures into Target Opinion Word Extraction with Deep Learning

Amir Pouran Ben Veyseh, Nasim Nouri, Franck Deroncourt, Dejing Dou and Thien Huu Nguyen

EmoTag1200: Understanding the Association between Emojis and Emotions

Abu Awal Md Shoeb and Gerard de Melo

MIME: MIMicking Emotions for Empathetic Response Generation

Navonil Majumder, Pengfei Hong, Shanshan Peng, Jiankun Lu, Deepanway Ghosal, Alexander Gelbukh, Rada Mihalcea and Soujanya Poria

19:00–20:00 *Zoom Q&A Session 15*

19:00–20:00 *Zoom Q&A Session 15i: Information Retrieval and Text Mining*

Exploiting Structured Knowledge in Text via Graph-Guided Representation Learning

Tao Shen, Yi Mao, Pengcheng He, Guodong Long, Adam Trischler and Weizhu Chen

Named Entity Recognition Only from Word Embeddings

Ying Luo, Hai Zhao and Junlang Zhan

Text Classification Using Label Names Only: A Language Model Self-Training Approach

Yu Meng, Yunyi Zhang, Jiaxin Huang, Chenyan Xiong, Heng Ji, Chao Zhang and Jiawei Han

Neural Topic Modeling with Cycle-Consistent Adversarial Training

Xuemeng Hu, Rui Wang, Deyu Zhou and Yuxuan Xiong

19:00–20:00 *Zoom Q&A Session 15ii: NLP Applications*

Data Boost: Text Data Augmentation Through Reinforcement Learning Guided Conditional Generation

Ruibo Liu, Guangxuan Xu, Chenyan Jia, Weicheng Ma, Lili Wang and Soroush Vosoughi

Wednesday, November 18, 2020 (continued)

A State-independent and Time-evolving Network for Early Rumor Detection in Social Media

Rui Xia, Kaizhou Xuan and Jianfei Yu

PyMT5: multi-mode translation of natural language and Python code with transformers

Colin Clement, Dawn Drain, Jonathan Timcheck, Alexey Svyatkovskiy and Neel Sundaresan

PathQG: Neural Question Generation from Facts

Siyuan Wang, Zhongyu Wei, Zhihao Fan, Zengfeng Huang, Weijian Sun, Qi ZHANG and Xuanjing Huang

What time is it? Temporal Analysis of Novels

Allen Kim, Charuta Pethe and Steve Skiena

19:00–20:00 *Zoom Q&A Session 15iii: Semantics: Sentence-level Semantics, Textual Inference and Other areas*

COGS: A Compositional Generalization Challenge Based on Semantic Interpretation

Najoung Kim and Tal Linzen

An Analysis of Natural Language Inference Benchmarks through the Lens of Negation

Md Mosharaf Hossain, Venelin Kovatchev, Pranoy Dutta, Tiffany Kao, Elizabeth Wei and Eduardo Blanco

On the Sentence Embeddings from Pre-trained Language Models

Bohan Li, Hao Zhou, Junxian He, Mingxuan Wang, Yiming Yang and Lei Li

What Can We Learn from Collective Human Opinions on Natural Language Inference Data?

Yixin Nie, Xiang Zhou and Mohit Bansal

19:00–20:00 *Zoom Q&A Session 15iv: Language Generation*

Improving Text Generation with Student-Forcing Optimal Transport

Jianqiao Li, Chunyuan Li, Guoyin Wang, Hao Fu, Yuhchen Lin, Liqun Chen, Yizhe Zhang, Chenyang Tao, Ruiyi Zhang, Wenlin Wang, Dinghan Shen, Qian Yang and Lawrence Carin

UNION: An Unreferenced Metric for Evaluating Open-ended Story Generation

Jian Guan and Minlie Huang

Wednesday, November 18, 2020 (continued)

F²-Softmax: Diversifying Neural Text Generation via Frequency Factorized Softmax

Byung-Ju Choi, Jimin Hong, David Park and Sang Wan Lee

Partially-Aligned Data-to-Text Generation with Distant Supervision

Zihao Fu, Bei Shi, Wai Lam, Lidong Bing and Zhiyuan Liu

20:00–21:00 *Zoom Q&A Session 16*

20:00–21:00 *Zoom Q&A Session 16i: Dialog and Interactive Systems*

Like hiking? You probably enjoy nature: Persona-grounded Dialog with Commonsense Expansions

Bodhisattwa Prasad Majumder, Harsh Jhamtani, Taylor Berg-Kirkpatrick and Julian McAuley

A Probabilistic End-To-End Task-Oriented Dialog Model with Latent Belief States towards Semi-Supervised Learning

Yichi Zhang, Zhijian Ou, Min Hu and Junlan Feng

The World is Not Binary: Learning to Rank with Grayscale Data for Dialogue Response Selection

Zibo Lin, Deng Cai, Yan Wang, Xiaojiang Liu, Haitao Zheng and Shuming Shi

GRADE: Automatic Graph-Enhanced Coherence Metric for Evaluating Open-Domain Dialogue Systems

Lishan Huang, Zheng Ye, Jinghui Qin, Liang Lin and Xiaodan Liang

MedDialog: Large-scale Medical Dialogue Datasets

Guangtao Zeng, Wenmian Yang, Zeqian Ju, Yue Yang, Sicheng Wang, Ruisi Zhang, Meng Zhou, Jiaqi Zeng, Xiangyu Dong, Ruoyu Zhang, Hongchao Fang, Penghui Zhu, Shu Chen and Pengtao Xie

20:00–21:00 *Zoom Q&A Session 16ii: Interpretability and Analysis of Models for NLP*

An information theoretic view on selecting linguistic probes

Zining Zhu and Frank Rudzicz

With Little Power Comes Great Responsibility

Dallas Card, Peter Henderson, Urvashi Khandelwal, Robin Jia, Kyle Mahowald and Dan Jurafsky

Wednesday, November 18, 2020 (continued)

Dataset Cartography: Mapping and Diagnosing Datasets with Training Dynamics

Swabha Swayamdipta, Roy Schwartz, Nicholas Lourie, Yizhong Wang, Hannaneh Hajishirzi, Noah A. Smith and Yejin Choi

Evaluating and Characterizing Human Rationales

Samuel Carton, Anirudh Rathore and Chenhao Tan

20:00–21:00 *Zoom Q&A Session 16iii: Summarization*

On Extractive and Abstractive Neural Document Summarization with Transformer Language Models

Jonathan Pilault, Raymond Li, Sandeep Subramanian and Chris Pal

Multi-Fact Correction in Abstractive Text Summarization

Yue Dong, Shuohang Wang, Zhe Gan, Yu Cheng, Jackie Chi Kit Cheung and Jingjing Liu

Evaluating the Factual Consistency of Abstractive Text Summarization

Wojciech Kryscinski, Bryan McCann, Caiming Xiong and Richard Socher

Re-evaluating Evaluation in Text Summarization

Manik Bhandari, Pranav Narayan Gour, Atabak Ashfaq, Pengfei Liu and Graham Neubig

VMSMO: Learning to Generate Multimodal Summary for Video-based News Articles

Mingzhe Li, Xiuying Chen, Shen Gao, Zhangming Chan, Dongyan Zhao and Rui Yan

21:00–21:45 *Business Meeting*

21:45–21:50 *Mini-break*

21:50–22:20 *Best Paper Awards and Closing*