EMNLP 2020

2020 Conference on Empirical Methods in Natural Language Processing

Proceedings of the Conference

November 16–20, 2020

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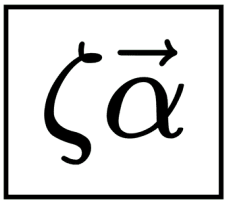

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Preface by the General Chair

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 Lemao 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 Karën 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 reproduciblity 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, Aurelie Nevol, 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 in1989, 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.

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

12:00–13:00 *Zoom Q&A Session 1*

12:00–13:00 *Zoom Q&A Session 1i: 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 Hulpuș and Heiner Stuckenschmidt

12:00–13:00 *Zoom Q&A Session 1ii: 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

Automatic Machine Translation Evaluation in Many Languages via Zero-Shot Paraphrasing
Brian Thompson and Matt Post

12:00–13:00 *Zoom Q&A Session 1iii: 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 1iv: Interpretability and Analysis of Models for NLP*

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

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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*

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

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 Poczos 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*

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

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

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 1ii: 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
Liying 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

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 1iii: 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

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

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 1iv: 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

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

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, Weiyan 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

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 Tieyun 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

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

Uncertainty-Aware Label Refinement for Sequence Labeling
Tao Gui, Jiacheng Ye, Qi Zhang, Zhengyan Li, Zichu Fei, Yeyun Gong and Xuanjing 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

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

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 Subword 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

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(nˆ6) down to O(nˆ3)
Caio Corro

Some Languages Seem Easier to Parse Because Their Treebanks Leak
Anders Søgaard

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

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

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

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

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 Budhraja, 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

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

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 Tieyun 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

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 Guigue, 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

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, Hiresh 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

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

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 Bratanic 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 Transfomer-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

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

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, Micaelah 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

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

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

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

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 Nallapati, 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

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

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 Subrahmanyan 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

CHARM: Inferring Personal Attributes from Conversations
Anna Tigunova, 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*

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, Ilia 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

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

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

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

Exploiting Sentence Order in Document Alignment
Brian Thompson and Philipp Koehn

XGLUE: A New Benchmark Datasetfor 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 Ziye Zhu

Supertagging Combinatory Categorial Grammar with Attentive Graph Convolutional Networks
Yuanhe Tian, Yan Song and Fei Xia

DAGA: Data Augmentation with a Generation Approach forLow-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, Moonsu Han and Sung Ju Hwang

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

Factual Error Correction for Abstractive Summarization Models
Meng Cao, Yue Dong, Jiapeng Wu and Jackie Chi Kit Cheung

Compressive Summarization with Plausibility and Salience 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

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

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
Qiongkai 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

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 Inferenceover 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

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
Liying 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 11*

04:00–05:00 *Zoom Q&A Session 11i: 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 11ii: 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
Qinzhuo 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

Generationary 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*

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

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

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

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

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 Sordoni, 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

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 Khoury, Rumen 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

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 Piraviperumal, 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

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

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

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

Incremental Neural Coreference Resolution in Constant Memory
Patrick Xia, João Sedoc and Benjamin Van Durme

Improving Low Compute Language Modeling with In-Domain Embedding Initialisation
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

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

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 Dernoncourt, 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

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

F^2-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

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*