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NAVER
Message from the General Chair

Welcome to ACL 2019, the 57th Annual Meeting of the Association for Computational Linguistics. This year the conference will be held on July 28–August 2, in the captivating city of Florence. This is the first time that the ACL annual conference visits Italy, and for this occasion, it has selected Florence, the capital of Italy’s Tuscany region, and one of the most beautiful and visited art cities in the world.

ACL 2019 received a record number of papers, close to three thousand, representing a sharp increase with respect to last year. At the moment of writing this letter, we are also expecting record attendance, with close to three thousand participants. This is a clear indicator of how vibrant and dynamic our field is at the moment. At the same time, this continuous growth poses a challenge to the organizers, who have to adapt quickly to numbers that surpass any previous estimation they had. I must say that the team of organizers worked very hard and very professionally in this complex scenario, with the goal of offering a conference program and setting that suit most of the participants. ACL needs to be large in many aspects, but at the same time it should be an enjoyable conference for all, and it should retain the original spirit of the ACL annual conferences. I hope the effort made will bring us close to this difficult double objective.

As usual, the conference will span a six-day period, and it will include a varied program with 9 tutorials (July 28), 18 one-day workshops (August 1-2), the co-located Fourth Conference on Machine Translation (WMT19; August 1-2), the third Widening NLP workshop (WiNLP 2019; July 28), and the exciting main ACL program (July 29-31), which this year will present a record number of 660 original papers. Additionally, the main program of ACL will feature the Student Research Workshop and System Demonstrations, with 72 and 34 presentations, respectively. Finally, apart from the papers, ACL 2019 will enjoy also the contribution from two exceptional keynote speakers, Pascale Fung and Liang Huang, and it will see an ACL award ceremony with the Lifetime Achievement Award, the Distinguished Service Award, and the Test-of-Time paper awards.

Each ACL conference is the culmination of a long process, which involves a large team of committed people. It is an honor for me to have coordinated such a team of talented people, who kindly volunteered their time to make this conference possible. I would like to thank each and every one of them. The Program Co-Chairs, Anna Korhonen and David Traum, did a superb job at managing the avalanche of submissions, putting together the program committee, and leading the paper selection process. The Local Co-Chairs, Alessandro Lenci, Bernardo Magnini, and Simonetta Montemagni, were crucial in coordinating with the PCO for all the local arrangements, which were very complex given the growing size of the conference. Fortunately, we all had the help and advice from Priscilla Rasmussen, the ACL Business Manager, who knows everything about ACL conferences, and how to make them a success. The ACL Executive Committee has also been very supportive all the time, providing timely guidance and help to solve the problems that arose in the way.

I want to thank all of the other chairs for their dedication and hard work, more than often under a tight schedule: Workshop Co-Chairs Barbara Plank and Sebastian Riedel; Tutorial Co-Chairs Preslav Nakov and Alexis Palmer; Demo Co-Chairs Enrique Alfonseca and Marta R. Costa-jussà; Student Research Workshop Co-Chairs Fernando Alva-Manchego, Eunsol Choi and Daniel Khashabi; SRW Faculty Advisors Hannaneh Hajishirzi, Aurelie Herbelot, Scott Wen-tau Yih and Yue Zhang; Publication Co-Chairs Douwe Kiela, Ivan Vulić, Shay Cohen and Kevin Gimpel; Conference Handbook Co-Chairs Elena Cabrio and Rachele Sprugnoli; Conference App Chair Andrea Cimino; Local Arrangement Committee Sara Goggi, Maria Cristina Schiavone, Sacha Bourdeaud’Hui; Local Sponsorship Co-Chairs Roberto Basili and Giovanni Semeraro; Publicity Co-Chairs Felice Dell’Orletta, Lucia Passaro and Sara Tonelli; Mentorship Co-Chairs Rada Mihalcea, Robert Frederking and Aakanksha Naik; and Student Volunteer Coordinators Dominique Brunato, Marco Senaldi and Giulia Venturi.

I am also very grateful to the chairs of the previous years’ conferences (not only ACL but also NAACL
and EMNLP), who were always ready to help and to provide advice, contributing to the transmission, from year to year, of all the know-how and collective memory.

Many thanks to the senior area chairs, the area chairs, the reviewers, our workshop organizers, our tutorial instructors, the authors and presenters of papers, and the invited speakers.

I am also deeply grateful to all the sponsors for their great support to the conference.

Finally, I would like to thank all the participants, who will be the main actors from July 28 to August 2, 2019. I am convinced that we will experience a fantastic conference, scientifically exciting and full of fond memories, in the unique environment of Florence. Looking forward to seeing all of you there!

_Lluís Màrquez_

ACL 2019 General Chair
Message from the Program Chairs

Welcome to the 57th Annual Meeting of the Association for Computational Linguistics! ACL 2019 has been a huge undertaking for the Program Committee (PC), but also very exciting as the conference has set new records on many fronts.

Anticipating a record number of submissions, we recruited the largest PC in the history of ACL. In November 2018, we issued a call for nominations for reviewers, Area Chairs (ACs) and Senior Area Chairs (SACs). By the deadline, we received 851 unique nominations that were used as a starting point for inviting members to the Program Committee. Our committee finally consisted of 2256 members!

In order to manage such a large committee effectively we extended the ACL 2018 practice and created a structure similar to the conferences that have a Senior Program Committee alongside the Program Committee. For the Senior PC, we recruited a relatively large number of Senior Area Chairs (46 SACs, 2–4 to head each area) and Area Chairs (184 ACs, 3–15 per area). We also differentiated between their roles so that SACs assign papers to ACs and reviewers and make recommendations for their area, while ACs each manage a smaller set of papers within the area, lead discussions with reviewers, write meta-reviews and make initial recommendations for a smaller set of papers. This structure also helps to compensate for the problem that our rapidly growing field is suffering from: the lack of experienced reviewers. As ACs focus on a smaller number of papers, they can pay more attention to the review process. As for reviewers, we had many of them this year: 2281. Our 22 thematic areas had 59–319 reviewers each.

We also looked into ways of improving efficiency and the experience for both authors and PC members. In particular, we dropped the paper bidding phase that would require thousands of people to each examine hundreds of abstracts each over a short period of time. Like NAACL 2019, we also dropped the author response phase that was stressful for authors and time-consuming but not hugely impactful on a larger scale. Finally, we adopted much simpler, streamlined review form, adapted from EMNLP 2018 that encouraged thorough review, but was less laborious for reviewers.

On the submission deadline, we were very glad that we had recruited such large PC and had made all these improvements for increased efficiency: we received 2905 submissions – a 75% increase over ACL 2018 and an all-time record for ACL-related conferences! After the review process, out of the total 2905 submissions (some of which were withdrawn or rejected without review for formatting and policy violations), 660 papers were finally accepted to appear in the conference, resulting in the overall acceptance rate of 22.7%. This is a little lower than the acceptance rate for ACL 2018 (24.9%) or ACL 2017 (23.3%) – yet remarkably similar when we consider the dramatic increase in submissions this year. Among the 660 accepted papers, we have 447 long papers and 213 short papers. As in previous years the acceptance rate is higher for long than for short papers (25.7% vs. 18.3%). Overall, ACL continues to be a very competitive conference. Continuing the tradition, ACL 2019 will also feature presentation of 22 papers that were accepted for publication in the Transactions of the Association for Computational Linguistics (TACL).

There are many we wish to thank for their great contribution to ACL 2019!

- The 46 SACs who did a massive job this year, equivalent in scope to duties of conference chairs from several years ago. They showed great patience with the increased workload (in the same brief schedule), working on weekends when necessary, and especially when our plan to replace paper bidding with TMPS didn’t work as smoothly as we had hoped. Their input was instrumental in guiding the final decisions on papers, in selecting the outstanding papers and PC members, and in planning the conference program.
• The 184 ACs who worked hard on guiding discussions and writing meta-reviews and who kept our tight deadlines remarkably well.
• Our very hard-working reviewers who provided authors with valuable feedback. Special thanks to those reviewers who agreed to take on a larger than average workload this year!
• Our amazing PC chair assistants who helped us manage the huge workload throughout this year: Simon Baker and Ehsan Shareghi. Thank you also to Qianchu Liu, Olga Majewska, Edoardo Ponti, Victor Prokhorov and Yi Zhu who stepped in to provide additional help at critical times.
• The thousands of authors who worked hard to submit their research for review. While we could only accept a fraction of the submissions, we appreciate the hard work that went into many of the others.
• TACL editors-in-chief Mark Johnson, Lillian Lee, and Brian Roark, for coordinating the TACL presentations with us
• The program co-chairs of ACL 2018, Iryna Gurevych and Yusuke Miyao, who provided us with enormously useful advice throughout the year, and often with very short notice!
• Other recent *ACL and EMNLP chairs who provided additional perspectives, documentation, advice and answers to questions, particularly Amanda Stent, Noah Smith, Julia Hockenmaier, and David Chiang.
• Douwe Kiela and Ivan Vulić, our super-organized publication chairs.
• Elena Cabrio and Rachele Sprugnoli for their help with the conference handbook.
• Rich Gerber at SoftConf, who worked quickly and tirelessly to add new features to accommodate our new AC role and quickly resolve any difficulties we encountered with the START system.
• Priscilla Rasmussen, Alessandro Lenci, Bernardo Magnini and Simonetta Montemagni for their helpful advice on issues involving the conference venue and local organization.
• The ACL Executive, particularly Marti Hearst, the president when we started planning the conference, and Barbara Di Eugenio, the liaison for conferences to help us sort through policy issues.
• Felice Dell’Orletta, Lucia Passaro, and Sara Tonelli for their great support with communications and social media.
• Our invited speakers Pascale Fung and Liang Huang who made the program of this conference even stronger!
• And last but not least Lluís Màrquez, our general chair, who gave us invaluable advice and did a fantastic job with coordinating the organization of this largest ACL ever!

Our heartfelt thanks to all of you, and we hope you will enjoy ACL 2019 in beautiful Florence!

Anna Korhonen, University of Cambridge, UK
David Traum, University of Southern California, USA

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Ehsan Shareghi, University of Cambridge

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Senior Area Chairs are indicated in boldface.

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Kalliroi Georgila, Ryuichiro Higashinaka, Michel Galley, Zhou Yu, Milica Gasic, Rebecca J. Passonneau, Gabriel Skantze, Matthew Marge, Helen Hastie, Kazunori Komatani, Yun-Nung Chen, Pascale Fung

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Generation
Cecile Paris, Kees van Deemter, Leo Wanner, Anya Belz, Leila Kosseim, Advaith Siddharth, Nadjet Bouayad, Kathy McCoy, Stephanie M. Lukin, Matthew Stone, Nina Dethlefs, John Kelleher, Paul Piwek, Yoav Goldberg

Information Extraction and Text Mining
Alessandro Moschitti, Heng Ji, Mausam, Hannaneh Hajishirzi, Isabelle Augenstein, Nazli Goharian, Ruichong Huang, Kevin Cohen, Siddharth Patwardhan, Sumithra Velupillai, Yunyao Li, Gerard de Melo, Mark Stevenson, Avi Sil, Aurélie Névéol, Kenneth Church, Alan Ritter, Hoifung Poon, Nut Limsopatham

Linguistic Theories, Cognitive Modeling and Psycholinguistics
Frank Keller, Aline Villavicencio, Afra Alishahi, Yevgeni Berzak, Shuly Wintner, Vera Demberg, Emily Prud’hommeaux
Machine Learning

Chris Dyer, Ariadna Quattoni, Ashish Vaswani, Kai-Wei Chang, Fei Sha, Barbara Plank, William Wang, Tim Rocktäschel, Le Sun, Jason Naradowsky, Alice Oh, Amir Globerson, Pontus Stenetorp, Andreas Vlachos

Machine Translation

Trevor Cohn, Yang Liu, Dekai Wu, Kevin Duh, Jörg Tiedemann, Deyi Xiong, Taro Watanabe, Philipp Koehn, Marine Carpuat, Arianna Bisazza, Alexander Fraser, Zhaopeng Tu, Qun Liu, Yvette Graham, Daniel Cer, Minh-Thang Luong

Multidisciplinary and AC COI

Patrick Pantel, Julia Hockenmaier, Yoav Artzi, Bowen Zhou, Grzegorz Chrupała, Dong Nguyen, Simone Paolo Ponzetto, Sara Rosenthal

Multilinguality

Joakim Nivre, Timothy Baldwin, Anders Søgaard, Jonathan May, Christian Hardmeier

Phonology, Morphology and Word Segmentation

Graham Neubig, Hinrich Schütze, Ryan Cotterell, Manaal Faruqui, Hai Zhao, Kemal Oflazer, Miikka Silfverberg

Question Answering

Sanda Harabagiu, Zornitsa Kozareva, Kang Liu, Yansong Feng, Shafiq Joty, Eric Nyberg, Preslav Nakov, Giovanni Da San Martino, Jennifer Chu-Carroll, Idan Szpektor

Resources and Evaluation

Sara Tonelli, Ron Artstein, Gina-Anne Levow, Thierry Declerck, Nancy Ide, Kenji Sagae, Udo Kruschwitz, Beata Megyesi, RobertoNavigli, Owen Rambow

Sentence-level Semantics

Mona Diab, Ivan Titov, Wei Xu, Siva Reddy, Steven Bethard, Eduardo Blanco, Wenyu Chen, Liang Huang, Edward Grefenstette, Michael Roth, Mehrnoosh Sadrzadeh, Anette Frank

Sentiment Analysis and Argument Mining

Marie-Francine Moens, Bing Liu, Saif Mohammad, Els Lefever, Liang-Chih Yu, Yulan He, Oren Tsur, Claire Cardie, Yue Zhang, Swapna Somasundaran, Jinho D. Choi

Social Media

Cristian Danescu-Niculescu-Mizil, Jacob Eisenstein, Kalina Bontcheva, Nigel Collier, Dirk Hovy, David Jurgens, Tim Finin, Diyi Yang, Wei Gao, Wei Wei

Summarization

Mirella Lapata, Chin-Yew Lin, Wenjie Li, Xiaojun Wan, Jackie Chi Kit Cheung, Shashi Narayan, Xiaodan Zhu, Fei Liu
Tagging, Chunking, Syntax and Parsing
Phil Blunsom, Noah A. Smith, Roi Reichart, Marek Rei, Daisuke Kawahara, Emily Pitler, Omri Abend, Weiwei Sun

Textual Inference and Other Areas of Semantics
Sabine Schulte im Walde, Raffaella Bernardi, Omer Levy, Angeliki Lazaridou, Jonathan Berant, Vivek Srikumar, Dimitri Kartasakis, Christopher Potts, Roy Schwartz

Vision, Robotics, Multimodal, Grounding and Speech
Louis-Philippe Morency, Michael Johnston, Catharine Oertel, Matthias Scheutz, Sakriani Sakti, Elia Bruni, Manny Rayner, Douwe Kiela, Yonatan Bisk, Yale Song

Word-level Semantics
Eneko Agirre, Diana McCarthy, Mohammad Taher Pilehvar, Ekaterina Shutova, Ivan Vulić, Laura Rimell, Paul Cook, Chris Biemann, Marianna Apidianaki, Diarmuid Ó Séaghdha, Jose Camacho-Collados, Aitor Soroa

Applications
Joel Tetreault, Karin Verspoor, Ekaterina Kochmar, Vinodkumar Prabhakaran, Razvan Bunescu, Sarvnaz Karimi, Filip Ginter, Vincent Ng, Beth Ann Hockey, Jens Edlund, Maria Liakata

Reviewers: (all 2000+ of them)
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Abstract: Simultaneous interpretation (i.e., translating concurrently with the source language speech) is widely used in many scenarios including multilateral organizations (UN/EU), international summits (APEC/G-20), legal proceedings, and press conferences. However, it is well known to be one of the most challenging tasks for humans due to the simultaneous perception and production in two languages. As a result, there are only a few thousand professional simultaneous interpreters world-wide, and each of them can only sustain for 15-30 minutes in each turn. On the other hand, simultaneous translation (either speech-to-text or speech-to-speech) is also notoriously difficult for machines and has remained one of the holy grails of AI. A key challenge here is the word order difference between the source and target languages. For example, if you simultaneously translate German (an SOV language) to English (an SVO language), you often have to wait for the sentence-final German verb. Therefore, most existing “real-time” translation systems resort to conventional full-sentence translation, causing an undesirable latency of at least one sentence, rendering the audience largely out of sync with the speaker. There have been efforts towards genuine simultaneous translation, but with limited success.

Recently, at Baidu Research, we discovered a much simpler and surprisingly effective approach to simultaneous (speech-to-text) translation by designing a “prefix-to-prefix” framework tailed to simultaneity requirements. This is in contrast with the “sequence-to-sequence” framework which assumes the availability of the full input sentence. Our approach results in the first simultaneous translation system that achieves reasonable translation quality with controllable latency. Our technique has been successfully deployed to simultaneously translate Chinese speeches into English subtitles at the 2018 Baidu World Conference, and has been demoed live at NeuIPS 2018 Expo Day.

Inspired by the success of this very simple approach, we have extended it to produce more flexible translation strategies. Our work has also generated renewed interest in this long-standing problem in the CL community; for instance, two recent papers from Google proposed interesting improvements based on our ideas. Time permitting, I will also discuss our efforts towards the ultimate goal of simultaneous speech-to-speech translation, and conclude with a list of remaining challenges.

See demos, media coverage, and more info at: https://simultrans-demo.github.io/

Bio: Liang Huang is Principal Scientist and Head of Institute of Deep Learning USA (IDL-US) at Baidu Research and Assistant Professor (on leave) at Oregon State University. He received his PhD from the University of Pennsylvania in 2008 and BS from Shanghai Jiao Tong University in 2003. He was previously a research scientist at Google, a research assistant professor at USC/ISI, an assistant professor at CUNY, a part-time research scientist at IBM. His research is in the theoretical aspects of computational linguistics. Many of his efficient algorithms in parsing, translation, and structured prediction have become standards in the field, for which he received a Best Paper Award at ACL 2008, a Best Paper Honorable Mention at EMNLP 2016, and several best paper nominations (ACL 2007, EMNLP 2008, ACL 2010, and SIGMOD 2018). He is also a computational biologist where he adapts his parsing algorithms to RNA and protein folding. He is an award-winning teacher and a best-selling author. His work has garnered widespread media attention including Fortune, CNBC, IEEE Spectrum, and MIT Technology Review.
Invited Talk – Loquentes Machinae: Technology, Applications, and Ethics of Conversational Systems
Pascale Fung
Professor, Hong Kong University of Science & Technology (HKUST)

Abstract: From HAL in “2001: Space Odyssey” to Samantha in “Her”, conversational systems have always captured the public’s imagination as the ultimate intelligent machine. The famous Turing Test was designed to determine whether a machine “thinks” like human or not, based on natural conversation between human and a machine. With the advent of smart devices, conversational systems are suddenly everywhere, talking and responding to us from our phones, speakers, cars and call centers. Meanwhile, the public is also becoming increasingly concerned about privacy and security issues of these systems.

In the decades since the first DARPA Communicator project, conversational systems come in many different forms. Whereas research systems are predominantly based on deep learning approaches today, most of the commercial systems from the US and Asia are still using template-based and retrieval-based approaches. Recent advances in such systems include endowing them with the ability to (1) learn to memorize; (2) learn to personalize; and (3) learn to empathize. In all aspects of R&D in this area, we encounter the challenge of a lack of well-balanced and well-labeled data. Hence, multi-task and meta-learning have been proposed as possible solutions.

In this talk, I will give an overview of some of the technical challenges, approaches and applications of conversational systems, and the debates on ethical issues surrounding them. I will also highlight some of the cultural differences in this area and discuss how we can collaborate internationally to build conversational systems that are secure, safe, and fair for all.

Bio: Pascale Fung is a Professor in the Department of Electronic & Computer Engineering and the Department of Computer Science & Engineering at the Hong Kong University of Science & Technology (HKUST). She is the Director of the multidisciplinary Centre for AI Research (CAiRE) at HKUST, to promote R&D in beneficial and human-centered AI. She is an elected Fellow of the Institute of Electrical and Electronics Engineers (IEEE) and an elected Fellow of the International Speech Communication Association (ISCA) for her contributions to the interdisciplinary area of spoken language human-machine interactions. She co-founded the Human Language Technology Center (HTLC) and is an affiliated faculty with the Robotics Institute and the Big Data Institute, both at HKUST. She is a past president and current board member of ACL SIGDAT, and past technical program chair of ACL and EMNLP conferences. She was Editor for Computer Speech and Language, Associate Editor for the IEEE/ACM Transactions on Audio, Speech and Language Processing and the Transactions on Association for Computational Linguistics. She was Technical Program Chair for IEEE ICASSP 2018 and will be TPC again in 2020 and 2024.

Fung’s work has always been focused on building intelligent systems that can understand and empathize with humans. Her specific areas of research are using statistical modelling and deep learning for natural language processing, spoken language systems, emotion and sentiment recognition. Pascale Fung has applied many of her research group’s results in the fields of, among others, robotics, IoT, and financial analytics. Her efforts led to the launch of the world’s first Chinese natural language search engine in 2001, the first Chinese virtual assistant for smartphones in 2010, and the first emotional intelligent speaker in 2017. Pascale Fung is a faculty expert for the World Economic Forum, and is a member of the Partnership on AI for the Benefit of Humanity and Society. She has been invited as an AI expert to different government initiatives in China, Japan, the UAE, India, the European Union and the United Nations. She has spoken extensively on using AI for public good and on the need for international collaborations in this area.
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10:30–10:50  One Time of Interaction May Not Be Enough: Go Deep with an Interaction-over-Interaction Network for Response Selection in Dialogues
Chongyang Tao, Wei Wu, Can Xu, Wenpeng Hu, Dongyan Zhao and Rui Yan

10:50–11:10  Incremental Transformer with Deliberation Decoder for Document Grounded Conversations
Zekang Li, Cheng Niu, Fandong Meng, Yang Feng, Qian Li and Jie Zhou

11:10–11:30  Improving Multi-turn Dialogue Modelling with Utterance ReWriter
Hui Su, Xiaoyu Shen, Rongzhi Zhang, Fei Sun, Pengwei Hu, Cheng Niu and Jie Zhou

11:30–11:43  Do Neural Dialog Systems Use the Conversation History Effectively? An Empirical Study
Chinnadhurai Sankar, Sandeep Subramanian, Chris Pal, Sarath Chandar and Yoshua Bengio

11:43–11:56  Boosting Dialog Response Generation
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11:56–12:09  Constructing Interpretive Spatio-Temporal Features for Multi-Turn Responses Selection
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10:50–11:10 Semantic Expressive Capacity with Bounded Memory
Antoine Venant and Alexander Koller

11:10–11:30 AMR Parsing as Sequence-to-Graph Transduction
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11:30–11:50 Generating Logical Forms from Graph Representations of Text and Entities
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11:50–12:10 Learning Compressed Sentence Representations for On-Device Text Processing
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11:30–11:43 Effective Adversarial Regularization for Neural Machine Translation
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11:30–11:43  You Only Need Attention to Traverse Trees
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shuai Cao and Jackie Chi Kit Cheung

[Resources and Evaluation]

MOROCO: The Moldavian and Romanian Dialectal Corpus
Andrei Butnaru and Radu Tudor Ionescu

Just "OneSeC" for Producing Multilingual Sense-Annotated Data
Bianca Scarlini, Tommaso Pasini and Roberto Navigli

How to (Properly) Evaluate Cross-Lingual Word Embeddings: On Strong Baselines,
Comparative Analyses, and Some Misconceptions
Goran Glavaš, Robert Litschko, Sebastian Ruder and Ivan Vulić

SP-10K: A Large-scale Evaluation Set for Selectional Preference Acquisition
Hongming Zhang, Hantian Ding and Yangqiu Song

A Wind of Change: Detecting and Evaluating Lexical Semantic Change across Times and Domains
Dominik Schlechtweg, Anna Häilty, Marco Del Tredici and Sabine Schulte im Walde

Errudite: Scalable, Reproducible, and Testable Error Analysis
Tongshuang Wu, Marco Tulio Ribeiro, Jeffrey Heer and Daniel Weld

DocRED: A Large-Scale Document-Level Relation Extraction Dataset
Yuan Yao, Deming Ye, Peng Li, Xu Han, Yankai Lin, Zhenghao Liu, Zhiyuan Liu,
Lixin Huang, Jie Zhou and Maosong Sun

ChID: A Large-scale Chinese IDiom Dataset for Cloze Test
Chujie Zheng, Minlie Huang and Aixin Sun

Automatic Evaluation of Local Topic Quality
Boyd-Graber and Kevin Seppi
Monday, July 29, 2019 (continued)

Crowdsourcing and Aggregating Nested Markable Annotations
Chris Madge, Juntao Yu, Jon Chamberlain, Udo Kruschwitz, Silviu Paun and Massimo Poesio

10:30–12:10 Student Research Workshop Poster Session 1

12:10–13:50 Lunch


13:50–14:10 Transferable Multi-Domain State Generator for Task-Oriented Dialogue Systems
Chien-Sheng Wu, Andrea Madotto, Ehsan Hosseini-Asl, Caiming Xiong, Richard Socher and Pascale Fung

14:10–14:30 Multi-Task Networks with Universe, Group, and Task Feature Learning
Shiva Pentyala, Mengwen Liu and Markus Dreyer

14:30–14:50 Constrained Decoding for Neural NLG from Compositional Representations in Task-Oriented Dialogue
Anusha Balakrishnan, Jinfeng Rao, Kartikeya Upasani, Michael White and Rajen Subba

14:50–15:10 [TACL] Learning End-to-End Goal-Oriented Dialog with Maximal User Task Success and Minimal Human Agent Use
Janarthanan Rajendran, Jatin Ganhotra and Lazaros C. Polymenakos

15:10–15:30 OpenDialKG: Explainable Conversational Reasoning with Attention-based Walks over Knowledge Graphs
Seungwhan Moon, Pararth Shah, Anuj Kumar and Rajen Subba

13:50–15:30 Session 2B: Textual Inference and Other Areas of Semantics

13:50–14:10 Coupling Retrieval and Meta-Learning for Context-Dependent Semantic Parsing
Daya Guo, Duyu Tang, Nan Duan, Ming Zhou and Jian Yin

14:10–14:30 Knowledge-aware Pronoun Coreference Resolution
Hongming Zhang, Yan Song, Yangqiu Song and Dong Yu
Monday, July 29, 2019 (continued)

14:30–14:50  Don’t Take the Premise for Granted: Mitigating Artifacts in Natural Language Inference
Yonatan Belinkov, Adam Poliak, Stuart Shieber, Benjamin Van Durme and Alexander Rush

14:50–15:10  GEAR: Graph-based Evidence Aggregating and Reasoning for Fact Verification
Jie Zhou, Xu Han, Cheng Yang, Zhiyuan Liu, Lifeng Wang, Changcheng Li and Maosong Sun

15:10–15:30  SherLIIC: A Typed Event-Focused Lexical Inference Benchmark for Evaluating Natural Language Inference
Martin Schmitt and Hinrich Schütze

13:50–15:30  Session 2C: Applications 1 - Health

13:50–14:10  Extracting Symptoms and their Status from Clinical Conversations
Nan Du, Kai Chen, Anjuli Kannan, Linh Tran, Yuhui Chen and Izhak Shafran

14:10–14:30  What Makes a Good Counselor? Learning to Distinguish between High-quality and Low-quality Counseling Conversations
Verónica Pérez-Rosas, Xinyi Wu, Kenneth Resnicow and Rada Mihalcea

14:30–14:50  Finding Your Voice: The Linguistic Development of Mental Health Counselors
Justine Zhang, Robert Filbin, Christine Morrison, Jaclyn Weiser and Cristian Danescu-Niculescu-Mizil

14:50–15:03  Towards Automating Healthcare Question Answering in a Noisy Multilingual Low-Resource Setting
Jeanne E. Daniel, Willie Brink, Ryan Eloff and Charles Copley

15:03–15:16  Joint Entity Extraction and Assertion Detection for Clinical Text
Parminder Bhatia, Busra Celikkaya and Mohammed Khalilia

David Vilares and Carlos Gómez-Rodriguez
Monday, July 29, 2019 (continued)

13:50–15:30 Session 2D: Sentiment Analysis and Argument Mining 1

13:50–14:10 *Are You Convinced? Choosing the More Convincing Evidence with a Siamese Network*
   Martin Gleize, Eyal Shnarch, Leshem Choshen, Lena Dankin, Guy Moshkowich, Ranit Aharonov and Noam Slonim

14:10–14:30 *From Surrogacy to Adoption; From Bitcoin to Cryptocurrency: Debate Topic Expansion*

14:30–14:50 *Multimodal and Multi-view Models for Emotion Recognition*
   Gustavo Aguilar, Viktor Rozgic, Weiran Wang and Chao Wang

14:50–15:10 *Emotion-Cause Pair Extraction: A New Task to Emotion Analysis in Texts*
   Rui Xia and Zixiang Ding

15:10–15:30 *Argument Invention from First Principles*
   Yonatan Bilu, Ariel Gera, Daniel Hershcovich, Benjamin Sznajder, Dan Lahav, Guy Moshkowich, Anael Malet, Assaf Gavron and Noam Slonim

13:50–15:30 Session 2E: Summarization 1

13:50–14:10 *Improving the Similarity Measure of Determinantal Point Processes for Extractive Multi-Document Summarization*
   Sangwoo Cho, Logan Lebanoff, Hassan Foroosh and Fei Liu

14:10–14:30 *Global Optimization under Length Constraint for Neural Text Summarization*
   Takuya Makino, Tomoya Iwakura, Hiroya Takamura and Manabu Okumura

14:30–14:50 *Searching for Effective Neural Extractive Summarization: What Works and What’s Next*
   Ming Zhong, Pengfei Liu, Danqing Wang, Xipeng Qiu and Xuanjing Huang

14:50–15:10 *A Simple Theoretical Model of Importance for Summarization*
   Maxime Peyrard

15:10–15:30 *Multi-News: A Large-Scale Multi-Document Summarization Dataset and Abstractive Hierarchical Model*
   Alexander Fabbri, Irene Li, Tianwei She, Suyi Li and Dragomir Radev
Monday, July 29, 2019 (continued)

13:50–15:30  **Session 2F: Document Analysis**

13:50–14:10  *Generating Natural Language Adversarial Examples through Probability Weighted Word Saliency*  
Shuhuai Ren, Yihe Deng, Kun He and Wanxiang Che

14:10–14:30  *Heuristic Authorship Obfuscation*  
Janek Bevendorff, Martin Potthast, Matthias Hagen and Benno Stein

14:30–14:50  *[TACL] SECTOR: A Neural Model for Coherent Topic Segmentation and Classification*  
Sebastian Arnold, Rudolf Schneider, Philippe Cudré-Mauroux, Felix A. Gers and Alexander Löser

14:50–15:10  *[TACL] Categorical Metadata Representation for Customized Text Classification*  
Jihyeok Kim, Reinald Kim Amplayo, Kyungjae Lee, Sua Sung, Minji Seo and Seung-won Hwang

15:10–15:30  *Text Categorization by Learning Predominant Sense of Words as Auxiliary Task*  
Kazuya Shimura, Jiyi Li and Fumiyo Fukumoto

13:50–15:30  **Poster Session 2**

[Applications]

*DeepSentiPeer: Harnessing Sentiment in Review Texts to Recommend Peer Review Decisions*  
Tirthankar Ghosal, Rajeev Verma, Asif Ekbal and Pushpak Bhattacharyya

*Gated Embeddings in End-to-End Speech Recognition for Conversational-Context Fusion*  
Suyoun Kim, Siddharth Dalmia and Florian Metze

*Figurative Usage Detection of Symptom Words to Improve Personal Health Mention Detection*  
Adith Iyer, Aditya Joshi, Sarvnaz Karimi, Ross Sparks and Cecile Paris

*Complex Word Identification as a Sequence Labelling Task*  
Sian Gooding and Ekaterina Kochmar

*Neural News Recommendation with Topic-Aware News Representation*  
Chuhan Wu, Fangzhao Wu, Mingxiao An, Yongfeng Huang and Xing Xie
Poetry to Prose Conversion in Sanskrit as a Linearisation Task: A Case for Low-Resource Languages
Amrith Krishna, Vishnu Sharma, Bishal Santra, Aishik Chakraborty, Pavankumar Satuluri and Pawan Goyal

Learning Emphasis Selection for Written Text in Visual Media from Crowd-Sourced Label Distributions
Amirreza Shirani, Franck Dernoncourt, Paul Asente, Nedim Lipka, Seokhwan Kim, Jose Echevarria and Thamar Solorio

Rumor Detection by Exploiting User Credibility Information, Attention and Multi-task Learning
Quanzhi Li, Qiong Zhang and Luo Si

Context-specific Language Modeling for Human Trafficking Detection from Online Advertisements
Saeideh Shahrokhi Esfahani, Michael J. Cafarella, Maziyar Baran Pouyan, Gregory DeAngelo, Elena Eneva and Andy E. Fano

[Machine Translation]

Self-Attentional Models for Lattice Inputs
Matthias Sperber, Graham Neubig, Ngoc-Quan Pham and Alex Waibel

[TACL] Semantic Neural Machine Translation using AMR
Linfeng Song, Daniel Gildea, Yue Zhang, Zhiguo Wang and Jinsong Su

When a Good Translation is Wrong in Context: Context-Aware Machine Translation Improves on Deixis, Ellipsis, and Lexical Cohesion
Elena Voita, Rico Sennrich and Ivan Titov

A Compact and Language-Sensitive Multilingual Translation Method
Yining Wang, Long Zhou, Jiajun Zhang, Feifei Zhai, Jingfang Xu and Chengqing Zong

Unsupervised Parallel Sentence Extraction with Parallel Segment Detection Helps Machine Translation
Viktor Hangya and Alexander Fraser

Unsupervised Bilingual Word Embedding Agreement for Unsupervised Neural Machine Translation
Haipeng Sun, Rui Wang, Kehai Chen, Masao Utiyama, Eiichiro Sumita and Tiejun Zhao
Effective Cross-lingual Transfer of Neural Machine Translation Models without Shared Vocabularies
Yunsu Kim, Yingbo Gao and Hermann Ney

Improved Zero-shot Neural Machine Translation via Ignoring Spurious Correlations
Jiatao Gu, Yong Wang, Kyunghyun Cho and Victor O.K. Li

Syntactically Supervised Transformers for Faster Neural Machine Translation
Nader Akoury, Kalpesh Krishna and Mohit Iyyer

Dynamically Composing Domain-Data Selection with Clean-Data Selection by “Co-Curricular Learning” for Neural Machine Translation
Wei Wang, Isaac Caswell and Ciprian Chelba

On the Word Alignment from Neural Machine Translation
Xintong Li, Guanlin Li, Lemao Liu, Max Meng and Shuming Shi

Imitation Learning for Non-Autoregressive Neural Machine Translation
Bingzhen Wei, Mingxuan Wang, Hao Zhou, Junyang Lin and Xu Sun

Monotonic Infinite Lookback Attention for Simultaneous Machine Translation
Naveen Arivazhagan, Colin Cherry, Wolfgang Macherey, Chung-Cheng Chiu, Semih Yavuz, Ruoming Pang, Wei Li and Colin Raffel

[Information Extraction and Text Mining]

Global Textual Relation Embedding for Relational Understanding
Zhiyu Chen, Hanwen Zha, Honglei Liu, Wenhui Chen, Xifeng Yan and Yu Su

Graph Neural Networks with Generated Parameters for Relation Extraction
Hao Zhu, Yankai Lin, Zhiyuan Liu, Jie Fu, Tat-Seng Chua and Maosong Sun

Entity-Relation Extraction as Multi-Turn Question Answering
Xiaoya Li, Fan Yin, Zijun Sun, Xiayu Li, Arianna Yuan, Duo Chai, Mingxin Zhou and Jiwei Li

Exploiting Entity BIO Tag Embeddings and Multi-task Learning for Relation Extraction with Imbalanced Data
Wei Ye, Bo Li, Rui Xie, Zhonghao Sheng, Long Chen and Shikun Zhang
Joint Type Inference on Entities and Relations via Graph Convolutional Networks  
Changzhi Sun, Yeyun Gong, Yuanbin Wu, Ming Gong, Daxin Jiang, Man Lan,  
Shiliang Sun and Nan Duan

Extracting Multiple-Relations in One-Pass with Pre-Trained Transformers  
Haoyu Wang, Ming Tan, Mo Yu, Shiyu Chang, Dakuo Wang, Kun Xu, Xiaoxiao  
Guo and Saloni Potdar

Unsupervised Information Extraction: Regularizing Discriminative Approaches with Relation Distribution Losses  
Etienne Simon, Vincent Guigue and Benjamin Piwowarski

Fine-tuning Pre-Trained Transformer Language Models to Distantly Supervised Relation Extraction  
Christoph Alt, Marc Hübner and Leonhard Hennig

ARNOR: Attention Regularization based Noise Reduction for Distant Supervision Relation Classification  
Wei Jia, Dai Dai, Xinyan Xiao and Hua Wu

GraphRel: Modeling Text as Relational Graphs for Joint Entity and Relation Extraction  
Tsu-Jui Fu, Peng-Hsuan Li and Wei-Yun Ma

DIAG-NRE: A Neural Pattern Diagnosis Framework for Distantly Supervised Neural Relation Extraction  
Shun Zheng, Xu Han, Yankai Lin, Peilin Yu, Lu Chen, Ling Huang, Zhiyuan Liu and Wei Xu

Multi-grained Named Entity Recognition  
Congying Xia, Chenwei Zhang, Tao Yang, Yaliang Li, Nan Du, Xian Wu, Wei Fan,  
Fenglong Ma and Philip Yu

ERNIE: Enhanced Language Representation with Informative Entities  
Zhengyan Zhang, Xu Han, Zhiyuan Liu, Xin Jiang, Maosong Sun and Qun Liu

Multi-Channel Graph Neural Network for Entity Alignment  
Yixin Cao, Zhiyuan Liu, Chengjiang Li, Zhiyuan Liu, Juanzi Li and Tat-Seng Chua

A Neural Multi-digraph Model for Chinese NER with Gazetteers  
Ruixue Ding, Pengjun Xie, Xiaoyan Zhang, Wei Lu, Linlin Li and Luo Si
Monday, July 29, 2019 (continued)

[Machine Learning]

*Improved Language Modeling by Decoding the Past*
Siddhartha Brahma

*Training Hybrid Language Models by Marginalizing over Segmentations*
Edouard Grave, Sainbayar Sukhbaatar, Piotr Bojanowski and Armand Joulin

*Improving Neural Language Models by Segmenting, Attending, and Predicting the Future*
Hongyin Luo, Lan Jiang, Yonatan Belinkov and James Glass

*Lightweight and Efficient Neural Natural Language Processing with Quaternion Networks*
Yi Tay, Aston Zhang, Anh Tuan Luu, Jinfeng Rao, Shuai Zhang, Shuohang Wang, Jie Fu and Siu Cheung Hui

*Sparse Sequence-to-Sequence Models*
Ben Peters, Vlad Niculae and André F. T. Martins

*On the Robustness of Self-Attentive Models*
Yu-Lun Hsieh, Minhao Cheng, Da-Cheng Juan, Wei Wei, Wen-Lian Hsu and Cho-Jui Hsieh

*Exact Hard Monotonic Attention for Character-Level Transduction*
Shijie Wu and Ryan Cotterell

*A Lightweight Recurrent Network for Sequence Modeling*
Biao Zhang and Rico Sennrich

*Towards Scalable and Reliable Capsule Networks for Challenging NLP Applications*
Wei Zhao, Haiyun Peng, Steffen Eger, Erik Cambria and Min Yang

*Soft Representation Learning for Sparse Transfer*
Haeju Park, Jinyoung Yeo, Gengyu Wang and Seung-won Hwang

*Learning Representations from Imperfect Time Series Data via Tensor Rank Regularization*
Paul Pu Liang, Zhun Liu, Yao-Hung Hubert Tsai, Qibin Zhao, Ruslan Salakhutdinov and Louis-Philippe Morency
Monday, July 29, 2019 (continued)

Towards Lossless Encoding of Sentences
Gabriele Prato, Mathieu Duchesneau, Sarath Chandar and Alain Tapp

[Phonology, Morphology and Word Segmentation]

Open Vocabulary Learning for Neural Chinese Pinyin IME
Zhuosheng Zhang, Yafang Huang and Hai Zhao

Using LSTMs to Assess the Obligatoriness of Phonological Distinctive Features for Phonotactic Learning
Nicole Mirea and Klinton Bicknell

Better Character Language Modeling through Morphology
Terra Blevins and Luke Zettlemoyer

Historical Text Normalization with Delayed Rewards
Simon Flachs, Marcel Bollmann and Anders Søgaard

Stochastic Tokenization with a Language Model for Neural Text Classification
Tatsuya Hiraoka, Hiroyuki Shindo and Yuji Matsumoto

13:50–15:30 Demo Session 1

15:30–16:00 Break
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16:00–17:40 Session 3A: Bias in Language Processing

16:00–16:20 Mitigating Gender Bias in Natural Language Processing: Literature Review
Tony Sun, Andrew Gaut, Shirlyn Tang, Yuxin Huang, Mai ElSherief, Jieyu Zhao, Diba Mirza, Elizabeth Belding, Kai-Wei Chang and William Yang Wang

16:20–16:40 Gender-preserving Debiasing for Pre-trained Word Embeddings
Masahiro Kaneko and Danushka Bollegala

16:40–17:00 Counterfactual Data Augmentation for Mitigating Gender Stereotypes in Languages with Rich Morphology
Ran Zmigrod, Sebastian J. Mielke, Hanna Wallach and Ryan Cotterell

17:00–17:13 A Transparent Framework for Evaluating Unintended Demographic Bias in Word Embeddings
Chris Sweeney and Maryam Najafian

17:13–17:26 The Risk of Racial Bias in Hate Speech Detection
Maarten Sap, Dallas Card, Saadia Gabriel, Yejin Choi and Noah A. Smith

17:26–17:39 Evaluating Gender Bias in Machine Translation
Gabriel Stanovsky, Noah A. Smith and Luke Zettlemoyer

16:00–17:40 Session 3B: Word-level Semantics 1

16:00–16:20 LSTMEmbed: Learning Word and Sense Representations from a Large Semantically Annotated Corpus with Long Short-Term Memories
Ignacio Iacobacci and Roberto Navigli

16:20–16:40 Understanding Undesirable Word Embedding Associations
Kawin Ethayarajh, David Duvenaud and Graeme Hirst

16:40–17:00 Unsupervised Discovery of Gendered Language through Latent-Variable Modeling
Alexander Miserlis Hoyle, Lawrence Wolf-Sonkin, Hanna Wallach, Isabelle Augenstein and Ryan Cotterell

17:00–17:20 Topic Sensitive Attention on Generic Corpora Corrects Sense Bias in Pretrained Embeddings
Vihari Piratla, Sunita Sarawagi and Soumen Chakrabarti
Monday, July 29, 2019 (continued)

17:20–17:40 SphereRE: Distinguishing Lexical Relations with Hyperspherical Relation Embeddings
Chengyu Wang, Xiaofeng He and Aoying Zhou

16:00–17:40 Session 3C: Multilinguality and Morphology

16:00–16:20 Multilingual Factor Analysis
Francisco Vargas, Kamen Brestnichki, Alex Papadopoulos Korfiatis and Nils Hammerla

Pratik Jawanpuria, Arjun Balgovind, Anoop Kunchukuttan and Bamdev Mishra

16:40–17:00 Meaning to Form: Measuring Systematicity as Information
Tiago Pimentel, Arya D. McCarthy, Damian Blasi, Brian Roark and Ryan Cotterell

17:00–17:20 Learning Morphosyntactic Analyzers from the Bible via Iterative Annotation Projection across 26 Languages
Garrett Nicolai and David Yarowsky

17:20–17:40 Adversarial Multitask Learning for Joint Multi-Feature and Multi-Dialect Morphological Modeling
Nasser Zalmout and Nizar Habash

16:00–17:40 Session 3D: Machine Translation 2

16:00–16:20 Neural Machine Translation with Reordering Embeddings
Kehai Chen, Rui Wang, Masao Utiyama and Eiichiro Sumita

16:20–16:40 Neural Fuzzy Repair: Integrating Fuzzy Matches into Neural Machine Translation
Bram Bulte and Arda Tezcan

16:40–17:00 Learning Deep Transformer Models for Machine Translation
Qiang Wang, Bei Li, Tong Xiao, Jingbo Zhu, Changliang Li, Derek F. Wong and Lidia S. Chao

17:00–17:13 Generating Diverse Translations with Sentence Codes
Raphael Shu, Hideki Nakayama and Kyunghyun Cho

17:13–17:26 Self-Supervised Neural Machine Translation
Dana Ruiter, Cristina España-Bonet and Josef van Genabith
Monday, July 29, 2019 (continued)

17:26–17:39 Exploring Phoneme-Level Speech Representations for End-to-End Speech Translation
Elizabeth Salesky, Matthias Sperber and Alan W Black

16:00–17:40 Session 3E: Vision, Robotics, Multimodal, Grounding and Speech

16:00–16:20 Visually Grounded Neural Syntax Acquisition
Haoyue Shi, Jiayuan Mao, Kevin Gimpel and Karen Livescu

Vihan Jain, Gabriel Magalhaes, Alexander Ku, Ashish Vaswani, Eugene Ie and Jason Baldridge

16:40–17:00 Expressing Visual Relationships via Language
Hao Tan, Franck Dernoncourt, Zhe Lin, Trung Bui and Mohit Bansal

17:00–17:20 Weakly-Supervised Spatio-Temporally Grounding Natural Sentence in Video
Zhenfang Chen, Lin Ma, Wenhan Luo and Kwan-Yee Kenneth Wong

Janosch Haber, Tim Baumgärtner, Ece Takmaz, Lieke Gelderloos, Elia Bruni and Raquel Fernández

16:00–17:40 Session 3F: Machine Learning 2

16:00–16:20 Continual and Multi-Task Architecture Search
Ramakanth Pasunuru and Mohit Bansal

16:20–16:40 Semi-supervised Stochastic Multi-Domain Learning using Variational Inference
Yitong Li, Timothy Baldwin and Trevor Cohn

16:40–17:00 Boosting Entity Linking Performance by Leveraging Unlabeled Documents
Phong Le and Ivan Titov

17:00–17:20 Pre-Learning Environment Representations for Data-Efficient Neural Instruction Following
David Gaddy and Dan Klein
Monday, July 29, 2019 (continued)

17:20–17:40  Reinforced Training Data Selection for Domain Adaptation  
Miaofeng Liu, Yan Song, Hongbin Zou and Tong Zhang

16:00–17:40  Poster Session 3

[Generation]

Generating Long and Informative Reviews with Aspect-Aware Coarse-to-Fine Decoding  
Junyi Li, Wayne Xin Zhao, Ji-Rong Wen and Yang Song

Qingyun Wang, Lifu Huang, Zhiying Jiang, Kevin Knight, Heng Ji, Mohit Bansal and Yi Luan

Rhetorically Controlled Encoder-Decoder for Modern Chinese Poetry Generation  
Zhiqiang Liu, Zuohui Fu, Jie Cao, Gerard de Melo, Yik-Cheung Tam, Cheng Niu and Jie Zhou

Enhancing Topic-to-Essay Generation with External Commonsense Knowledge  
Pengcheng Yang, Lei Li, Fuli Luo, Tianyu Liu and Xu Sun

Towards Fine-grained Text Sentiment Transfer  
Fuli Luo, Peng Li, Pengcheng Yang, Jie Zhou, Yutong Tan, Baobao Chang, Zhifang Sui and Xu Sun

Data-to-text Generation with Entity Modeling  
Ratish Puduppully, Li Dong and Mirella Lapata

Ensuring Readability and Data-fidelity using Head-modifier Templates in Deep Type Description Generation  
Jiangjie Chen, Ao Wang, Haiyun Jiang, Suo Feng, Chenguang Li and Yanghua Xiao

Key Fact as Pivot: A Two-Stage Model for Low Resource Table-to-Text Generation  
Shuming Ma, Pengcheng Yang, Tianyu Liu, Peng Li, Jie Zhou and Xu Sun

Unsupervised Neural Text Simplification  
Sai Surya, Abhijit Mishra, Anirban Laha, Parag Jain and Karthik Sankaranarayanan
Syntax-Infused Variational Autoencoder for Text Generation
Xinyuan Zhang, Yi Yang, Siyang Yuan, Dinghan Shen and Lawrence Carin

Towards Generating Long and Coherent Text with Multi-Level Latent Variable Models
Dinghan Shen, Asli Celikyilmaz, Yizhe Zhang, Liqun Chen, Xin Wang, Jianfeng Gao and Lawrence Carin

Jointly Learning Semantic Parser and Natural Language Generator via Dual Information Maximization
Hai Ye, Wenjie Li and Lu Wang

Learning to Select, Track, and Generate for Data-to-Text
Hayate Iso, Yui Uehara, Tatsuya Ishigaki, Hiroshi Noji, Eiji Aramaki, Ichiro Kobayashi, Yusuke Miyao, Naoaki Okazaki and Hiroya Takamura

Reinforced Dynamic Reasoning for Conversational Question Generation
Boyuan Pan, Hao Li, Ziyu Yao, Deng Cai and Huan Sun

[Summarization]

TalkSumm: A Dataset and Scalable Annotation Method for Scientific Paper Summarization Based on Conference Talks
Guy Lev, Michal Shmueli-Scheuer, Jonathan Herzig, Achiya Jerbi and David Konopnicki

Improving Abstractive Document Summarization with Salient Information Modeling
Yongjian You, Weijia Jia, Tianyi Liu and Wenmian Yang

Masaru Isonuma, Junichiro Mori and Ichiro Sakata

BiSET: Bi-directional Selective Encoding with Template for Abstractive Summarization
Kai Wang, Xiaojun Quan and Rui Wang

Neural Keyphrase Generation via Reinforcement Learning with Adaptive Rewards
Hou Pong Chan, Wang Chen, Lu Wang and Irwin King

Scoring Sentence Singletons and Pairs for Abstractive Summarization
Logan Lebanoff, Kaiqiang Song, Franck Dernoncourt, Doo Soon Kim, Seokhwan Kim, Walter Chang and Fei Liu
Keep Meeting Summaries on Topic: Abstractive Multi-Modal Meeting Summarization
Manling Li, Lingyu Zhang, Heng Ji and Richard J. Radke

Adversarial Domain Adaptation Using Artificial Titles for Abstractive Title Generation
Francine Chen and Yan-Ying Chen

BIGPATENT: A Large-Scale Dataset for Abstractive and Coherent Summarization
Eva Sharma, Chen Li and Lu Wang

Ranking Generated Summaries by Correctness: An Interesting but Challenging Application for Natural Language Inference
Tobias Falke, Leonardo F. R. Ribeiro, Prasetya Ajie Utama, Ido Dagan and Iryna Gurevych

Self-Supervised Learning for Contextualized Extractive Summarization
Hong Wang, Xin Wang, Wenhan Xiong, Mo Yu, Xiaoxiao Guo, Shiyu Chang and William Yang Wang

On the Summarization of Consumer Health Questions
Asma Ben Abacha and Dina Demner-Fushman

Unsupervised Rewriter for Multi-Sentence Compression
Yang Zhao, Xiaoyu Shen, Wei Bi and Akiko Aizawa

[Question Answering]

Inferential Machine Comprehension: Answering Questions by Recursively Deducing the Evidence Chain from Text
Jianxing Yu, Zhengjun Zha and Jian Yin

Token-level Dynamic Self-Attention Network for Multi-Passage Reading Comprehension
Yimeng Zhuang and Huadong Wang

Explicit Utilization of General Knowledge in Machine Reading Comprehension
Chao Wang and Hui Jiang

Multi-style Generative Reading Comprehension
Kyosuke Nishida, Itsumi Saito, Kosuke Nishida, Kazutoshi Shinoda, Atsushi Ot-suka, Hisako Asano and Junji Tomita
Retrieve, Read, Rerank: Towards End-to-End Multi-Document Reading Comprehension  
Minghao Hu, Yuxing Peng, Zhen Huang and Dongsheng Li

Multi-Hop Paragraph Retrieval for Open-Domain Question Answering  
Yair Feldman and Ran El-Yaniv

E3: Entailment-driven Extracting and Editing for Conversational Machine Reading  
Victor Zhong and Luke Zettlemoyer

Generating Question-Answer Hierarchies  
Kalpesh Krishna and Mohit Iyyer

Answering while Summarizing: Multi-task Learning for Multi-hop QA with Evidence Extraction  
Kosuke Nishida, Kyosuke Nishida, Masaaki Nagata, Atsushi Otsuka, Itsumi Saito, Hisako Asano and Junji Tomita

Enhancing Pre-Trained Language Representations with Rich Knowledge for Machine Reading Comprehension  
An Yang, Quan Wang, Jing Liu, Kai Liu, Yajuan Lyu, Hua Wu, Qiaqiao She and Sujian Li

XQA: A Cross-lingual Open-domain Question Answering Dataset  
Jiahua Liu, Yankai Lin, Zhiyuan Liu and Maosong Sun

[TACL] Complex Program Induction for Querying Knowledge Bases in the Absence of Gold Programs  
Amrita Saha, Ghulam Ahmed Ansari, Abhishek Laddha, Karthik Sankaranarayanan and Soumen Chakrabarti

[TACL] Trick Me If You Can: Human-in-the-loop Generation of Adversarial Question Answering  
Eric Wallace, Pedro Rodriguez, Shi Feng, Ikuya Yamada and Jordan Boyd-Graber

[Tagging, Chunking, Syntax and Parsing]

Compound Probabilistic Context-Free Grammars for Grammar Induction  
Yoon Kim, Chris Dyer and Alexander Rush

Semi-supervised Domain Adaptation for Dependency Parsing  
Zhenghua Li, Xue Peng, Min Zhang, Rui Wang and Luo Si

Head-Driven Phrase Structure Grammar Parsing on Penn Treebank  
Junru Zhou and Hai Zhao
Distantly Supervised Named Entity Recognition using Positive-Unlabeled Learning
Minlong Peng, Xiaoyu Xing, Qi Zhang, Jinlan Fu and Xuanjing Huang

Multi-Task Semantic Dependency Parsing with Policy Gradient for Learning Easy-First Strategies
Shuhei Kurita and Anders Søgaard

GCDT: A Global Context Enhanced Deep Transition Architecture for Sequence Labeling
Yijin Liu, Fandong Meng, Jinchao Zhang, Jinan Xu, Yufeng Chen and Jie Zhou

Unsupervised Learning of PCFGs with Normalizing Flow
Lifeng Jin, Finale Doshi-Velez, Timothy Miller, Lane Schwartz and William Schuler

Variance of Average Surprisal: A Better Predictor for Quality of Grammar from Unsupervised PCFG Induction
Lifeng Jin and William Schuler

Cross-Domain NER using Cross-Domain Language Modeling
Chen Jia, Xiaobo Liang and Yue Zhang

Graph-based Dependency Parsing with Graph Neural Networks
Tao Ji, Yuanbin Wu and Man Lan

Wide-Coverage Neural A* Parsing for Minimalist Grammars
John Torr, Milos Stanojevic, Mark Steedman and Shay B. Cohen

[Social Media]

Multi-Modal Sarcasm Detection in Twitter with Hierarchical Fusion Model
Yitao Cai, Huiyu Cai and Xiaojun Wan

Topic-Aware Neural Keyphrase Generation for Social Media Language
Yue Wang, Jing Li, Hou Pong Chan, Irwin King, Michael R. Lyu and Shuming Shi

#YouToo? Detection of Personal Recollections of Sexual Harassment on Social Media
Arijit Ghosh Chowdhury, Ramit Sawhney, Rajiv Ratn Shah and Debanjan Mahata

Multi-task Pairwise Neural Ranking for Hashtag Segmentation
Mounica Maddela, Wei Xu and Daniel Preotiuc-Pietro
Entity-Centric Contextual Affective Analysis
Anjalie Field and Yulia Tsvetkov

Sentence-Level Evidence Embedding for Claim Verification with Hierarchical Attention Networks
Jing Ma, Wei Gao, Shafiq Joty and Kam-Fai Wong

Predicting Human Activities from User-Generated Content
Steven Wilson and Rada Mihalcea

You Write like You Eat: Stylistic Variation as a Predictor of Social Stratification
Angelo Basile, Albert Gatt and Malvina Nissim

Encoding Social Information with Graph Convolutional Networks for Political Perspective Detection in News Media
Chang Li and Dan Goldwasser

Fine-Grained Spoiler Detection from Large-Scale Review Corpora
Mengting Wan, Rishabh Misra, Ndapa Nakashole and Julian McAuley

Celebrity Profiling
Matti Wiegmann, Benno Stein and Martin Potthast

Dataset Creation for Ranking Constructive News Comments
Soichiro Fujita, Hayato Kobayashi and Manabu Okumura

Enhancing Air Quality Prediction with Social Media and Natural Language Processing
Jyun-Yu Jiang, Xue Sun, Wei Wang and Sean Young

Twitter Homophily: Network Based Prediction of User’s Occupation
Jiaqi Pan, Rishabh Bhardwaj, Wei Lu, Hai Leong Chieu, Xinghao Pan and Ni Yi Puay
Tuesday, July 30, 2019

09:00–10:00 Invited Talk 1: Simultaneous Translation: Recent Advances and Remaining Challenges by Liang Huang

10:00–10:30 Break

10:30–12:10 Session 4A: Dialogue and Generation
10:30–10:50 Domain Adaptive Dialog Generation via Meta Learning
   Kun Qian and Zhou Yu
10:50–11:10 Strategies for Structuring Story Generation
   Angela Fan, Mike Lewis and Yann Dauphin
11:10–11:30 Argument Generation with Retrieval, Planning, and Realization
   Xinyu Hua, Zhe Hu and Lu Wang
11:30–11:43 A Simple Recipe towards Reducing Hallucination in Neural Surface Realisation
   Feng Nie, Jin-Ge Yao, Jinpeng Wang, Rong Pan and Chin-Yew Lin
11:43–11:56 Cross-Modal Commentator: Automatic Machine Commenting Based on Cross-Modal Information
   Pengcheng Yang, Zhihan Zhang, Fuli Luo, Lei Li, Chengyang Huang and Xu Sun
11:56–12:09 A Working Memory Model for Task-oriented Dialog Response Generation
   Xiuyi Chen, Jiaming Xu and Bo Xu
Tuesday, July 30, 2019 (continued)

10:30–12:10 Session 4B: Question Answering 1 - Multi-Hop

10:30–10:50  

*Cognitive Graph for Multi-Hop Reading Comprehension at Scale*  
Ming Ding, Chang Zhou, Qibin Chen, Hongxia Yang and Jie Tang

10:50–11:10  

*Multi-hop Reading Comprehension across Multiple Documents by Reasoning over Heterogeneous Graphs*  
Ming Tu, Guangtao Wang, Jing Huang, Yun Tang, Xiaodong He and Bowen Zhou

11:10–11:30  

*Explore, Propose, and Assemble: An Interpretable Model for Multi-Hop Reading Comprehension*  
Yichen Jiang, Nitish Joshi, Yen-Chun Chen and Mohit Bansal

11:30–11:50  

*Avoiding Reasoning Shortcuts: Adversarial Evaluation, Training, and Model Development for Multi-Hop QA*  
Yichen Jiang and Mohit Bansal

11:50–12:10  

*Exploiting Explicit Paths for Multi-hop Reading Comprehension*  
Souvik Kundu, Tushar Khot, Ashish Sabharwal and Peter Clark

10:30–12:10 Session 4C: Evaluation

10:30–10:50  

*Sentence Mover’s Similarity: Automatic Evaluation for Multi-Sentence Texts*  
Elizabeth Clark, Asli Celikyilmaz and Noah A. Smith

10:50–11:10  

*Analysis of Automatic Annotation Suggestions for Hard Discourse-Level Tasks in Expert Domains*  
Claudia Schulz, Christian M. Meyer, Jan Kiesewetter, Michael Sailer, Elisabeth Bauer, Martin R. Fischer, Frank Fischer and Iryna Gurevych

11:10–11:30  

*Deep Dominance - How to Properly Compare Deep Neural Models*  
Rotem Dror, Segev Shlomov and Roi Reichart

11:30–11:43  

*We Need to Talk about Standard Splits*  
Kyle Gorman and Steven Bedrick

11:43–11:56  

*Aiming beyond the Obvious: Identifying Non-Obvious Cases in Semantic Similarity Datasets*  
Nicole Peinelt, Maria Liakata and Dong Nguyen
Tuesday, July 30, 2019 (continued)

Nitika Mathur, Timothy Baldwin and Trevor Cohn

10:30–12:10 Session 4D: Social Media 1

10:30–10:50 Joint Effects of Context and User History for Predicting Online Conversation Re-entries
Xingshan Zeng, Jing Li, Lu Wang and Kam-Fai Wong

10:50–11:10 CONAN - COunter NArratives through Nichesourcing: a Multilingual Dataset of Responses to Fight Online Hate Speech
Yi-Ling Chung, Elizaveta Kuzmenko, Serra Sinem Tekiroglu and Marco Guerini

11:10–11:30 Categorizing and Inferring the Relationship between the Text and Image of Twitter Posts
Alakananda Vempala and Daniel Preoțiuc-Pietro

11:30–11:43 Who Sides with Whom? Towards Computational Construction of Discourse Networks for Political Debates
Sebastian Padó, Andre Blessing, Nico Blokker, Erenay Dayanik, Sebastian Haunss and Jonas Kuhn

11:43–11:56 Analyzing Linguistic Differences between Owner and Staff Attributed Tweets
Daniel Preoțiuc-Pietro and Rita Devlin Marier

11:56–12:09 Exploring Author Context for Detecting Intended vs Perceived Sarcasm
Silviu Oprea and Walid Magdy
Tuesday, July 30, 2019 (continued)

10:30–12:10  Session 4E: Information Extraction and Text Mining 2

10:30–10:50  *Open Domain Event Extraction Using Neural Latent Variable Models*  
Xiao Liu, Heyan Huang and Yue Zhang

10:50–11:10  *Multi-Level Matching and Aggregation Network for Few-Shot Relation Classification*  
Zhi-Xiu Ye and Zhen-Hua Ling

11:10–11:30  *Quantifying Similarity between Relations with Fact Distribution*  
Weize Chen, Hao Zhu, Xu Han, Zhiyuan Liu and Maosong Sun

11:30–11:50  *Matching the Blanks: Distributional Similarity for Relation Learning*  
Livio Baldini Soares, Nicholas FitzGerald, Jeffrey Ling and Tom Kwiatkowski

11:50–12:10  *Fine-Grained Temporal Relation Extraction*  
Siddharth Vashishtha, Benjamin Van Durme and Aaron Steven White

10:30–12:10  Session 4F: Machine Learning 3

10:30–10:50  *FIESTA: Fast IdEntification of State-of-The-Art models using adaptive bandit algorithms*  
Henry Moss, Andrew Moore, David Leslie and Paul Rayson

10:50–11:10  *Is Attention Interpretable?*  
Sofia Serrano and Noah A. Smith

11:10–11:30  *Correlating Neural and Symbolic Representations of Language*  
Grzegorz Chrupała and Afra Alishahi

11:30–11:50  *Interpretable Neural Predictions with Differentiable Binary Variables*  
Joost Bastings, Wilker Aziz and Ivan Titov

11:50–12:10  *Transformer-XL: Attentive Language Models beyond a Fixed-Length Context*  
Zihang Dai, Zhilin Yang, Yiming Yang, Jaime Carbonell, Quoc Le and Ruslan Salakhutdinov
Tuesday, July 30, 2019 (continued)

10:30–12:10 Poster Session 4

[Machine Translation]

Domain Adaptation of Neural Machine Translation by Lexicon Induction
Junjie Hu, Mengzhou Xia, Graham Neubig and Jaime Carbonell

Reference Network for Neural Machine Translation
Han Fu, Chenghao Liu and Jianling Sun

Retrieving Sequential Information for Non-Autoregressive Neural Machine Translation
Chenze Shao, Yang Feng, Jinchao Zhang, Fandong Meng, Xilin Chen and Jie Zhou

STACL: Simultaneous Translation with Implicit Anticipation and Controllable Latency using Prefix-to-Prefix Framework
Mingbo Ma, Liang Huang, Hao Xiong, Renjie Zheng, Kaibo Liu, Baigong Zheng, Chuanqiang Zhang, Zhongjun He, Hairong Liu, Xing Li, Hua Wu and Haifeng Wang

Look Harder: A Neural Machine Translation Model with Hard Attention
Sathish Reddy Indurthi, Insoo Chung and Sangha Kim

Robust Neural Machine Translation with Joint Textual and Phonetic Embedding
Hairong Liu, Mingbo Ma, Liang Huang, Hao Xiong and Zhongjun He

A Simple and Effective Approach to Automatic Post-Editing with Transfer Learning
Gonçalo M. Correia and André F. T. Martins

Translating Translationese: A Two-Step Approach to Unsupervised Machine Translation
Nima Pourdamghani, Nada Aldarrab, Marjan Ghazvininejad, Kevin Knight and Jonathan May

Training Neural Machine Translation to Apply Terminology Constraints
Georgiana Dinu, Prashant Mathur, Marcello Federico and Yaser Al-Onaizan

Leveraging Local and Global Patterns for Self-Attention Networks
Mingzhou Xu, Derek F. Wong, Baosong Yang, Yue Zhang and Lidia S. Chao
Sentence-Level Agreement for Neural Machine Translation
Mingming Yang, Rui Wang, Kehai Chen, Masao Utiyama, Eiichiro Sumita, Min Zhang and Tiejun Zhao

Multilingual Unsupervised NMT using Shared Encoder and Language-Specific Decoders
Sukanta Sen, Kamal Kumar Gupta, Asif Ekbal and Pushpak Bhattacharyya

Lattice-Based Transformer Encoder for Neural Machine Translation
Fengshun Xiao, Jiangtong Li, Hai Zhao, Rui Wang and Kehai Chen

[Multilinguality]

Multi-Source Cross-Lingual Model Transfer: Learning What to Share
Xilun Chen, Ahmed Hassan Awadallah, Hany Hassan, Wei Wang and Claire Cardie

Unsupervised Multilingual Word Embedding with Limited Resources using Neural Language Models
Takashi Wada, Tomoharu Iwata and Yuji Matsumoto

Choosing Transfer Languages for Cross-Lingual Learning
Yu-Hsiang Lin, Chian-Yu Chen, Jean Lee, Zirui Li, Yuyan Zhang, Mengzhou Xia, Shruti Rijhwani, Junxian He, Zhisong Zhang, Xuezhe Ma, Antonios Anastasopoulos, Patrick Littell and Graham Neubig

CogNet: A Large-Scale Cognate Database
Khuyagbaatar Batsuren, Gabor Bella and Fausto Giunchiglia

Neural Decipherment via Minimum-Cost Flow: From Ugaritic to Linear B
Jiaming Luo, Yuan Cao and Regina Barzilay

Cross-lingual Knowledge Graph Alignment via Graph Matching Neural Network
Kun Xu, Liwei Wang, Mo Yu, Yansong Feng, Yan Song, Zhiguo Wang and Dong Yu

Zero-Shot Cross-Lingual Abstractive Sentence Summarization through Teaching Generation and Attention
Xiangyu Duan, Mingming Yin, Min Zhang, Boxing Chen and Weihua Luo

Improving Low-Resource Cross-lingual Document Retrieval by Reranking with Deep Bilingual Representations
Rui Zhang, Caitlin Westerfield, Sungrok Shim, Garrett Bingham, Alexander Fabbri, William Hu, Neha Verma and Dragomir Radev
Are Girls Neko or Shôjo? Cross-Lingual Alignment of Non-Isomorphic Embeddings with Iterative Normalization
Mozhi Zhang, Keyulu Xu, Ken-ichi Kawarabayashi, Stefanie Jegelka and Jordan Boyd-Graber

MAAM: A Morphology-Aware Alignment Model for Unsupervised Bilingual Lexicon Induction
Pengcheng Yang, Fuli Luo, Peng Chen, Tianyu Liu and Xu Sun

Margin-based Parallel Corpus Mining with Multilingual Sentence Embeddings
Mikel Artetxe and Holger Schwenk

JW300: A Wide-Coverage Parallel Corpus for Low-Resource Languages
Željko Agić and Ivan Vulić

Cross-Lingual Syntactic Transfer through Unsupervised Adaptation of Invertible Projections
Junxian He, Zhisong Zhang, Taylor Berg-Kirkpatrick and Graham Neubig

Unsupervised Joint Training of Bilingual Word Embeddings
Benjamin Marie and Atsushi Fujita

[Word-level Semantics]

Inferring Concept Hierarchies from Text Corpora via Hyperbolic Embeddings
Matthew Le, Stephen Roller, Laetitia Papaxanthos, Douwe Kiela and Maximilian Nickel

Is Word Segmentation Necessary for Deep Learning of Chinese Representations?
Xiaoya Li, Yuxian Meng, Xiaofei Sun, Qinghong Han, Arianna Yuan and Jiwei Li

Towards Understanding Linear Word Analogies
Kawin Ethayarajh, David Duvenaud and Graeme Hirst

On the Compositionality Prediction of Noun Phrases using Poincaré Embeddings
Abhik Jana, Dima Puzyrev, Alexander Panchenko, Pawan Goyal, Chris Biemann and Animesh Mukherjee

Robust Representation Learning of Biomedical Names
Minh C. Phan, Aixin Sun and Yi Tay
Relational Word Embeddings
Jose Camacho-Collados, Luis Espinosa Anke and Steven Schockaert

Unraveling Antonym’s Word Vectors through a Siamese-like Network
Mathias Etcheverry and Dina Wonsever

Incorporating Syntactic and Semantic Information in Word Embeddings using Graph Convolutional Networks
Shikhar Vashishth, Manik Bhandari, Prateek Yadav, Piyush Rai, Chiranjib Bhattarcharyya and Partha Talukdar

Word and Document Embedding with vMF-Mixture Priors on Context Word Vectors
Shoaib Jameel and Steven Schockaert

Delta Embedding Learning
Xiao Zhang, Ji Wu and Dejing Dou

Annotation and Automatic Classification of Aspectual Categories
Markus Egg, Helena Prepens and Will Roberts

Putting Words in Context: LSTM Language Models and Lexical Ambiguity
Laura Aina, Kristina Gulordava and Gemma Boleda

Making Fast Graph-based Algorithms with Graph Metric Embeddings
Andrey Kutuzov, Mohammad Dorgham, Oleksiy Oliynyk, Chris Biemann and Alexander Panchenko

Embedding Imputation with Grounded Language Information
Ziyi Yang, Chenguang Zhu, Vin Sachidananda and Eric Darve

The Effectiveness of Simple Hybrid Systems for Hyponym Discovery
William Held and Nizar Habash

BERT-based Lexical Substitution
Wangchunshu Zhou, Tao Ge, Ke Xu, Furu Wei and Ming Zhou

Exploring Numeracy in Word Embeddings
Aakanksha Naik, Abhilasha Ravichander, Carolyn Rose and Eduard Hovy
Monday, July 29, 2019 (continued)

10:30–12:10 Student Research Workshop Poster Session 2

12:10–13:50 Lunch

13:50–15:30 Session 5A: Generation 1

13:50–14:10 [TACL] Probabilistic Verb Selection for Data-to-Text Generation
Dell Zhang, Jiahao Yuan, Xiaoling Wang and Adam Foster

14:10–14:30 HighRES: Highlight-based Reference-less Evaluation of Summarization
Hardy Hardy, Shashi Narayan and Andreas Vlachos

14:30–14:50 EditNTS: An Neural Programmer-Interpreter Model for Sentence Simplification through Explicit Editing
Yue Dong, Zichao Li, Mehdi Rezagholizadeh and Jackie Chi Kit Cheung

14:50–15:10 Decomposable Neural Paraphrase Generation
Zichao Li, Xin Jiang, Lifeng Shang and Qun Liu

15:10–15:30 Transforming Complex Sentences into a Semantic Hierarchy
Christina Niklaus, Matthias Cetto, André Freitas and Siegfried Handschuh

13:50–15:30 Session 5B: Semantics

13:50–14:10 [TACL] No Word is an Island - A Transformation Weighting Model for Semantic Composition
Corina Dima, Daniël de Kok, Neele Witte and Erhard Hinrichs

14:10–14:30 [TACL] Syntax-aware Semantic Role Labeling without Parsing
Rui Cai and Mirella Lapata

14:30–14:50 Right for the Wrong Reasons: Diagnosing Syntactic Heuristics in Natural Language Inference
Tom McCoy, Ellie Pavlick and Tal Linzen

14:50–15:10 Zero-Shot Entity Linking by Reading Entity Descriptions
Lajanugen Logeswaran, Ming-Wei Chang, Kenton Lee, Kristina Toutanova, Jacob Devlin and Honglak Lee

Mohammad Javad Hosseini, Nathanael Chambers, Siva Reddy, Xavier R. Holt, Shay B. Cohen, Mark Johnson and Mark Steedman

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Tuesday, July 30, 2019 (continued)

13:50–15:30 Session 5C: Tagging, Chunking, Syntax and Parsing 2

13:50–14:10 [TACL] Joint Transition-Based Models for Morpho-Syntactic Parsing: Parsing Strategies for MRLs and a Case Study from Modern Hebrew
Amir More, Amit Seker, Victoria Basmova and Reut Tsarfaty

14:10–14:30 Dual Adversarial Neural Transfer for Low-Resource Named Entity Recognition
Joey Tianyi Zhou, Hao Zhang, Di Jin, Hongyuan Zhu, Meng Fang, Rick Siow Mong Goh and Kenneth Kwok

14:30–14:50 Scalable Syntax-Aware Language Models Using Knowledge Distillation
Adhiguna Kuncoro, Chris Dyer, Laura Rimell, Stephen Clark and Phil Blunsom

14:50–15:03 An Imitation Learning Approach to Unsupervised Parsing
Bowen Li, Lili Mou and Frank Keller

15:03–15:16 Women’s Syntactic Resilience and Men’s Grammatical Luck: Gender-Bias in Part-of-Speech Tagging and Dependency Parsing
Aparna Garimella, Carmen Banea, Dirk Hovy and Rada Mihalcea

15:16–15:29 Multilingual Constituency Parsing with Self-Attention and Pre-Training
Nikita Kitaev, Steven Cao and Dan Klein

13:50–15:30 Session 5D: Sentiment Analysis and Argument Mining 2

13:50–14:10 A Multilingual BPE Embedding Space for Universal Sentiment Lexicon Induction
Mengjie Zhao and Hinrich Schütze

14:10–14:30 Tree Communication Models for Sentiment Analysis
Yuan Zhang and Yue Zhang

14:30–14:50 Improved Sentiment Detection via Label Transfer from Monolingual to Synthetic Code-Switched Text
Bidisha Samanta, Niloy Ganguly and Soumen Chakrabarti

14:50–15:10 Exploring Sequence-to-Sequence Learning in Aspect Term Extraction
Dehong Ma, Sujian Li, Fangzhao Wu, Xing Xie and Houfeng Wang

15:10–15:30 Aspect Sentiment Classification Towards Question-Answering with Reinforced Bidirectional Attention Network
Jingjing Wang, Changlong Sun, Shoushan Li, Xiaozhong Liu, Luo Si, Min Zhang and Guodong Zhou
Tuesday, July 30, 2019 (continued)

13:50–15:30 Session 5E: Visual and Multimodal Question Answering

13:50–14:10  
\textit{ELI5: Long Form Question Answering}  
Angela Fan, Yacine Jernite, Ethan Perez, David Grangier, Jason Weston and Michael Auli

14:10–14:30  
\textit{Textbook Question Answering with Multi-modal Context Graph Understanding and Self-supervised Open-set Comprehension}  
Daesik Kim, Seonhoon Kim and Nojun Kwak

14:30–14:50  
\textit{Generating Question Relevant Captions to Aid Visual Question Answering}  
Jialin Wu, Zeyuan Hu and Raymond Mooney

14:50–15:03  
\textit{Multi-grained Attention with Object-level Grounding for Visual Question Answering}  
Pingping Huang, Jianhui Huang, Yuqing Guo, Min Qiao and Yong Zhu

15:03–15:16  
\textit{Psycholinguistics Meets Continual Learning: Measuring Catastrophic Forgetting in Visual Question Answering}  
Claudio Greco, Barbara Plank, Raquel Fernández and Raffaella Bernardi

15:16–15:29  
\textit{Improving Visual Question Answering by Referring to Generated Paragraph Captions}  
Hyounghun Kim and Mohit Bansal

13:50–15:30 Session 5F: Multidisciplinary

13:50–14:10  
\textit{Shared-Private Bilingual Word Embeddings for Neural Machine Translation}  
Xuebo Liu, Derek F. Wong, Yang Liu, Lidia S. Chao, Tong Xiao and Jingbo Zhu

14:10–14:30  
\textit{Literary Event Detection}  
Matthew Sims, Jong Ho Park and David Bamman

14:30–14:50  
\textit{Assessing the Ability of Self-Attention Networks to Learn Word Order}  
Baosong Yang, Longyue Wang, Derek F. Wong, Lidia S. Chao and Zhaopeng Tu

14:50–15:03  
\textit{Energy and Policy Considerations for Deep Learning in NLP}  
Emma Strubell, Ananya Ganesh and Andrew McCallum
Tuesday, July 30, 2019 (continued)

15:03–15:16  What Does BERT Learn about the Structure of Language?
Ganesh Jawahar, Benoît Sagot and Djamé Seddah

15:16–15:29  A Just and Comprehensive Strategy for Using NLP to Address Online Abuse
David Jurgens, Libby Hemphill and Eshwar Chandrasekharan

13:50–15:30  Poster Session 5

[Dialogue and Interactive Systems]

Learning from Dialogue after Deployment: Feed Yourself, Chatbot!
Braden Hancock, Antoine Bordes, Pierre-Emmanuel Mazare and Jason Weston

Generating Responses with a Specific Emotion in Dialog
Zhenqiao Song, Xiaoqing Zheng, Lu Liu, Mu Xu and Xuanjing Huang

Semantically Conditioned Dialog Response Generation via Hierarchical Disentangled Self-Attention
Wenhui Chen, Jianshu Chen, Pengda Qin, Xifeng Yan and William Yang Wang

Incremental Learning from Scratch for Task-Oriented Dialogue Systems
Weikang Wang, Jiajun Zhang, Qian Li, Mei-Yuh Hwang, Chengqing Zong and Zhifei Li

ReCoSa: Detecting the Relevant Contexts with Self-Attention for Multi-turn Dialogue Generation
Hainan Zhang, Yanyan Lan, Liang Pang, Jiafeng Guo and Xueqi Cheng

Dialogue Natural Language Inference
Sean Welleck, Jason Weston, Arthur Szlam and Kyunghyun Cho

Budgeted Policy Learning for Task-Oriented Dialogue Systems
Zhirui Zhang, Xiujun Li, Jianfeng Gao and Enhong Chen

Comparison of Diverse Decoding Methods from Conditional Language Models
Daphne Ippolito, Reno Kriz, Joao Sedoc, Maria Kustikova and Chris Callison-Burch
Retrieval-Enhanced Adversarial Training for Neural Response Generation
Qingfu Zhu, Lei Cui, Wei-Nan Zhang, Furu Wei and Ting Liu

Vocabulary Pyramid Network: Multi-Pass Encoding and Decoding with Multi-Level Vocabularies for Response Generation
Cao Liu, Shizhu He, Kang Liu and Jun Zhao

On-device Structured and Context Partitioned Projection Networks
Sujith Ravi and Zornitsa Kozareva

Proactive Human-Machine Conversation with Explicit Conversation Goal
Wenquan Wu, Zhen Guo, Xiangyang Zhou, Hua Wu, Xiyuan Zhang, Rongzhong Lian and Haifeng Wang

Learning a Matching Model with Co-teaching for Multi-turn Response Selection in Retrieval-based Dialogue Systems
Jiazhan Feng, Chongyang Tao, Wei Wu, Yansong Feng, Dongyan Zhao and Rui Yan

Learning to Abstract for Memory-augmented Conversational Response Generation
Zhiliang Tian, Wei Bi, Xiaopeng Li and Nevin L. Zhang

Are Training Samples Correlated? Learning to Generate Dialogue Responses with Multiple References
Lisong Qiu, Juntao Li, Wei Bi, Dongyan Zhao and Rui Yan

Pretraining Methods for Dialog Context Representation Learning
Shikib Mehri, Evgeniia Razumovskaia, Tiancheng Zhao and Maxine Eskenazi

A Large-Scale Corpus for Conversation Disentanglement

Self-Supervised Dialogue Learning
Jiawei Wu, Xin Wang and William Yang Wang
Linguistic Theories, Cognitive Modeling and Psycholinguistics

Are we there yet? Encoder-decoder neural networks as cognitive models of English past tense inflection
Maria Corkery, Yevgen Matusevych and Sharon Goldwater

A Spreading Activation Framework for Tracking Conceptual Complexity of Texts
Ioana Hulpus, Sanja Štajner and Heiner Stuckenschmidt

End-to-End Sequential Metaphor Identification Inspired by Linguistic Theories
Rui Mao, Chenghua Lin and Frank Guerin

Diachronic Sense Modeling with Deep Contextualized Word Embeddings: An Ecological View
Renfen Hu, Shen Li and Shichen Liang

Miss Tools and Mr Fruit: Emergent Communication in Agents Learning about Object Affordances
Diane Bouchacourt and Marco Baroni

CNNs found to jump around more skillfully than RNNs: Compositional Generalization in Seq2seq Convolutional Networks
Roberto Dessì and Marco Baroni

Uncovering Probabilistic Implications in Typological Knowledge Bases
Johannes Bjerva, Yova Kementchedjhieva, Ryan Cotterell and Isabelle Augenstein

Is Word Segmentation Child’s Play in All Languages?
Georgia R. Loukatou, Steven Moran, Damian Blasi, Sabine Stoll and Alejandrina Cristia

On the Distribution of Deep Clausal Embeddings: A Large Cross-linguistic Study
Damian Blasi, Ryan Cotterell, Lawrence Wolf-Sonkin, Sabine Stoll, Balthasar Bickel and Marco Baroni

Attention-based Conditioning Methods for External Knowledge Integration
Katerina Margatina, Christos Baziotis and Alexandros Potamianos
[Resources and Evaluation]

**The KnowRef Coreference Corpus: Removing Gender and Number Cues for Difficult Pronominal Anaphora Resolution**
Ali Emami, Paul Trichelair, Adam Trischler, Kaheer Suleman, Hannes Schulz and Jackie Chi Kit Cheung

**SiRE: Self Attentive Edit Quality Prediction in Wikipedia**
Soumya Sarkar, Bhanu Prakash Reddy, Sandipan Sikdar and Animesh Mukherjee

**How Large Are Lions? Inducing Distributions over Quantitative Attributes**
Yanai Elazar, Abhijit Mahabal, Deepak Ramachandran, Tania Bedrax-Weiss and Dan Roth

**Fine-Grained Sentence Functions for Short-Text Conversation**
Wei Bi, Jun Gao, Xiaojiang Liu and Shuming Shi

**Give Me More Feedback II: Annotating Thesis Strength and Related Attributes in Student Essays**
Zixuan Ke, Hrishikesh Inamdar, Hui Lin and Vincent Ng

**Crowdsourcing and Validating Event-focused Emotion Corpora for German and English**
Enrica Troiano, Sebastian Padó and Roman Klinger

**Pay Attention when you Pay the Bills. A Multilingual Corpus with Dependency-based and Semantic Annotation of Collocations.**
Marcos Garcia, Marcos García Salido, Susana Sotelo, Estela Mosqueira and Margarita Alonso-Ramos

**Does it Make Sense? And Why? A Pilot Study for Sense Making and Explanation**
Cunxiang Wang, Shuaileong Liang, Yue Zhang, Xiaonan Li and Tian Gao

**Large Dataset and Language Model Fun-Tuning for Humor Recognition**
Vladislav Blinov, Valeria Bolotova-Baranova and Pavel Braslavski
[Machine Learning]

Towards Language Agnostic Universal Representations
Armen Aghajanyan, Xia Song and Saurabh Tiwary

Leveraging Meta Information in Short Text Aggregation
He Zhao, Lan Du, Guanfeng Liu and Wray Buntine

Exploiting Invertible Decoders for Unsupervised Sentence Representation Learning
Shuai Tang and Virginia R. de Sa

Self-Attentive, Multi-Context One-Class Classification for Unsupervised Anomaly Detection on Text
Lukas Ruff, Yury Zemlyanskiy, Robert Vandermeulen, Thomas Schnake and Marius Kloft

Hubless Nearest Neighbor Search for Bilingual Lexicon Induction
Jiaji Huang, Qiang Qiu and Kenneth Church

Distant Learning for Entity Linking with Automatic Noise Detection
Phong Le and Ivan Titov

Learning How to Active Learn by Dreaming
Thuy-Trang Vu, Ming Liu, Dinh Phung and Gholamreza Haffari

Few-Shot Representation Learning for Out-Of-Vocabulary Words
Ziniu Hu, Ting Chen, Kai-Wei Chang and Yizhou Sun

Neural Temporality Adaptation for Document Classification: Diachronic Word Embeddings and Domain Adaptation Models
Xiaolei Huang and Michael J. Paul

Learning Transferable Feature Representations Using Neural Networks
Himanshu Sharad Bhatt, Shourya Roy, Arun Rajkumar and Sriranjani Ramakrishnan

Bayes Test of Precision, Recall, and F1 Measure for Comparison of Two Natural Language Processing Models
Ruibo Wang and Jihong Li
Tuesday, July 30, 2019 (continued)

TIGS: An Inference Algorithm for Text Infilling with Gradient Search
Dayiheng Liu, Jie Fu, Pengfei Liu and Jiancheng Lv

Keeping Notes: Conditional Natural Language Generation with a Scratchpad Encoder
Ryan Benmalek, Madien Khabsa, Suma Desu, Claire Cardie and Michele Banko

13:50–15:30 Demo Session 2

15:30–16:00 Break

16:00–17:20 Lifetime Achievement Award + Talk and Test of Time Awards

17:20–17:30 Short Break

17:30–19:00 ACL Business Meeting

19:00–19:15 Break

19:15–late Social Event
Wednesday, July 31, 2019

09:00–10:00 Invited Talk 2: Loquentes Machinis: Technology, Applications, and Ethics of Conversational Systems by Pascale Fung

10:00–10:30 Break

10:30–12:10 Session 6A: Discourse and Pragmatics

10:30–10:50 Using Automatically Extracted Minimum Spans to Disentangle Coreference Evaluation from Boundary Detection
Nafise Sadat Moosavi, Leo Born, Massimo Poesio and Michael Strube

Shany Barhom, Vered Shwartz, Alon Eirew, Michael Bugert, Nils Reimers and Ido Dagan

11:10–11:30 A Unified Linear-Time Framework for Sentence-Level Discourse Parsing
Xiang Lin, Shafiq Joty, Prathyusha Jwalapuram and M Saiful Bari

11:30–11:43 Employing the Correspondence of Relations and Connectives to Identify Implicit Discourse Relations via Label Embeddings
Linh The Nguyen, Linh Van Ngo, Khoat Than and Thien Huu Nguyen

Nanjiang Jiang and Marie-Catherine de Marneffe

11:56–12:09 Multi-Relational Script Learning for Discourse Relations
I-Ta Lee and Dan Goldwasser
Wednesday, July 31, 2019 (continued)

10:30–12:10  Session 6B: Question Answering 2

10:30–10:50  Open-Domain Why-Question Answering with Adversarial Learning to Encode Answer Texts
Jong-Hoon Oh, Kazuma Kadowaki, Julien Kloetzer, Ryu Iida and Kentaro Torisawa

10:50–11:10  Learning to Ask Unanswerable Questions for Machine Reading Comprehension
Haichao Zhu, Li Dong, Furu Wei, Wenhui Wang, Bing Qin and Ting Liu

11:10–11:30  [TACL] Natural Questions: a Benchmark for Question Answering Research
Tom Kwiatkowski, Jennimaria Palomaki, Olivia Redfield, Michael Collins, Ankur Parikh, Chris Alberti, Danielle Epstein, Illia Polosukhin, Matthew Kelcey, Jacob Devlin, Kenton Lee, Kristina N. Toutanova, Llion Jones, Ming-Wei Chang, Andrew Dai, Jakob Uszkoreit, Quoc Le and Slav Petrov

11:30–11:43  Compositional Questions Do Not Necessitate Multi-hop Reasoning

11:43–11:56  Improving Question Answering over Incomplete KBs with Knowledge-Aware Reader
Wenhan Xiong, Mo Yu, Shiyu Chang, Xiaoxiao Guo and William Yang Wang

Xiang Zhang, Shizhu He, Kang Liu and Jun Zhao

10:30–12:10  Session 6C: Applications 2

10:30–10:50  The Language of Legal and Illegal Activity on the Darknet
Leshem Choshen, Dan Eldad, Daniel Horschovich, Elior Sulem and Omri Abend

10:50–11:10  Eliciting Knowledge from Experts: Automatic Transcript Parsing for Cognitive Task Analysis
Junyi Du, He Jiang, Jiaming Shen and Xiang Ren

11:10–11:30  Course Concept Expansion in MOOCs with External Knowledge and Interactive Game
Jifan Yu, Chenyu Wang, Gan Luo, Lei Hou, Juanzi Li, Zhiyuan Liu and Jie Tang

11:30–11:43  Towards Near-imperceptible Steganographic Text
Falcon Dai and Zheng Cai
Wednesday, July 31, 2019 (continued)

11:43–11:56  *Inter-sentence Relation Extraction with Document-level Graph Convolutional Neural Network*  
Sunil Kumar Sahu, Fenia Christopoulou, Makoto Miwa and Sophia Ananiadou

11:56–12:09  *Neural Legal Judgment Prediction in English*  
Ilias Chalkidis, Ion Androutsopoulos and Nikolaos Aletras

10:30–12:10  **Session 6D: Machine Translation 3**

10:30–10:50  *Robust Neural Machine Translation with Doubly Adversarial Inputs*  
Yong Cheng, Lu Jiang and Wolfgang Macherey

10:50–11:10  *Bridging the Gap between Training and Inference for Neural Machine Translation*  
Wen Zhang, Yang Feng, Fandong Meng, Di You and Qun Liu

11:10–11:30  [*TACL*]  *Integrating Weakly Supervised Word Sense Disambiguation into Neural Machine Translation*  
Xiao Pu, Nikolaos Pappas, James Henderson and Andrei Popescu-Belis

11:30–11:50  [*TACL*]  *Synchronous Bidirectional Neural Machine Translation*  
Long Zhou, Jiajun Zhang and Chengqing Zong

11:50–12:10  *Beyond BLEU: Training Neural Machine Translation with Semantic Similarity*  
John Wieting, Taylor Berg-Kirkpatrick, Kevin Gimpel and Graham Neubig

10:30–12:10  **Session 6E: Information Extraction and Text Mining 3**

10:30–10:50  *AutoML Strategy Based on Grammatical Evolution: A Case Study about Knowledge Discovery from Text*  
Suilan Estevez-Velarde, Yoan Gutiérrez, Andrés Montoyo and Yudivián Almeida-Cruz

10:50–11:10  *Distilling Discrimination and Generalization Knowledge for Event Detection via Delta-Representation Learning*  
Yaojie Lu, Hongyu Lin, Xianpei Han and Le Sun

11:10–11:30  *Chinese Relation Extraction with Multi-Grained Information and External Linguistic Knowledge*  
Ziran Li, Ning Ding, Zhiyuan Liu, Haitao Zheng and Ying Shen
Wednesday, July 31, 2019 (continued)

11:30–11:43  **A2N: Attending to Neighbors for Knowledge Graph Inference**  
Trapit Bansal, Da-Cheng Juan, Sujith Ravi and Andrew McCallum

11:43–11:56  **Graph based Neural Networks for Event Factuality Prediction using Syntactic and Semantic Structures**  
Amir Pouran Ben Veyseh, Thien Huu Nguyen and Dejing Dou

Tanya Goyal and Greg Durrett

10:30–12:10  **Session 6F: Machine Learning 4**

10:30–10:50  **Episodic Memory Reader: Learning What to Remember for Question Answering from Streaming Data**  
Moonsu Han, Minki Kang, Hyunwoo Jung and Sung Ju Hwang

10:50–11:10  **Selection Bias Explorations and Debias Methods for Natural Language Sentence Matching Datasets**  
Guanhua Zhang, Bing Bai, Jian Liang, Kun Bai, Shiyu Chang, Mo Yu, Conghui Zhu and Tiejun Zhao

11:10–11:30  **Real-Time Open-Domain Question Answering with Dense-Sparse Phrase Index**  
Minjoon Seo, Jinhuyuk Lee, Tom Kwiatkowski, Ankur Parikh, Ali Farhadi and Hannaneh Hajishirzi

11:30–11:50  **Language Modeling with Shared Grammar**  
Yuyu Zhang and Le Song

11:50–12:10  **[TACL] Densely Connected Graph Convolutional Networks for Graph-to-Sequence Learning**  
Zhijiang Guo, Yan Zhang, Zhiyang Teng and Wei Lu

10:30–12:10  **Poster Session 6**

**[Sentence-level semantics]**

**[TACL] Exploring Neural Methods for Parsing Discourse Representation Structures**  
Rik van Noord, Lasha Abzianidze, Antonio Toral and Johan Bos

**Zero-Shot Semantic Parsing for Instructions**  
Ofer Givoli and Roi Reichart
Can You Tell Me How to Get Past Sesame Street? Sentence-Level Pretraining Beyond Language Modeling
Alex Wang, Jan Hula, Patrick Xia, Raghavendra Pappagari, R. Thomas McCoy, Roma Patel, Najoung Kim, Ian Tenney, Yinghui Huang, Katherin Yu, Shuning Jin, Berlin Chen, Benjamin Van Durme, Edouard Grave, Ellie Pavlick and Samuel R. Bowman

Complex Question Decomposition for Semantic Parsing
Haoyu Zhang, Jingjing Cai, Jianjun Xu and Ji Wang

Multi-Task Deep Neural Networks for Natural Language Understanding
Xiaodong Liu, Pengcheng He, Weizhu Chen and Jianfeng Gao

DisSent: Learning Sentence Representations from Explicit Discourse Relations
Allen Nie, Erin Bennett and Noah Goodman

SParC: Cross-Domain Semantic Parsing in Context
Tao Yu, Rui Zhang, Michihiro Yasunaga, Yi Chern Tan, Xi Victoria Lin, Suyi Li, Heyang Er, Irene Li, Bo Pang, Tao Chen, Emily Ji, Shreyas Dixit, David Proctor, Sungrok Shim, Jonathan Kraft, Vincent Zhang, Caiming Xiong, Richard Socher and Dragomir Radev

Towards Complex Text-to-SQL in Cross-Domain Database with Intermediate Representation
Jiaqi Guo, Zecheng Zhan, Yan Gao, Yan Xiao, Jian-Guang Lou, Ting Liu and Dongmei Zhang

EigenSent: Spectral sentence embeddings using higher-order Dynamic Mode Decomposition
Subhradeep Kayal and George Tsatsaronis

SemBleu: A Robust Metric for AMR Parsing Evaluation
Linfeng Song and Daniel Gildea

Reranking for Neural Semantic Parsing
Pengcheng Yin and Graham Neubig

Representing Schema Structure with Graph Neural Networks for Text-to-SQL Parsing
Ben Bogin, Jonathan Berant and Matt Gardner

Human vs. Muppet: A Conservative Estimate of Human Performance on the GLUE Benchmark
Nikita Nangia and Samuel R. Bowman
Wednesday, July 31, 2019 (continued)

Compositional Semantic Parsing across Graphbanks
Matthias Lindemann, Jonas Groschwitz and Alexander Koller

Rewarding Smatch: Transition-Based AMR Parsing with Reinforcement Learning
Tahira Naseem, Abhishek Shah, Hui Wan, Radu Florian, Salim Roukos and Miguel Ballesteros

BERT RedisCOVERS THE Classical NLP Pipeline
Ian Tenney, Dipanjan Das and Ellie Pavlick

Simple and Effective ParaphrasTic Similarity from Parallel Translations
John Wieting, Kevin Gimpel, Graham Neubig and Taylor Berg-Kirkpatrick

Second-Order Semantic Dependency Parsing with End-to-End Neural Networks
Xinyu Wang, Jingxian Huang and Kewei Tu

[Sentiment Analysis and Argument Mining]

Towards Multimodal Sarcasm Detection (An _Obviously_ _Perfect Paper)_
Santiago Castro, Devamanyu Hazarika, Verónica Pérez-Rosas, Roger Zimmermann,
Rada Mihalcea and Soujanya Poria

Determining Relative Argument Specificity and Stance for Complex Argumentative Structures
Esin Durmus, Faisal Ladhak and Claire Cardie

Latent Variable Sentiment Grammar
Liwen Zhang, Kewei Tu and Yue Zhang

An Investigation of Transfer Learning-Based Sentiment Analysis in Japanese
Enkhbold Bataa and Joshua Wu

Probing Neural Network Comprehension of Natural Language Arguments
Timothy Niven and Hung-Yu Kao

Recognising Agreement and Disagreement between Stances with Reason Comparing Networks
Chang Xu, Cecile Paris, Surya Nepal and Ross Sparks

Toward ComprehensiVe Understanding of a Sentiment Based on Human Motives
Naoki Otani and Eduard Hovy

Context-aware Embedding for Targeted Aspect-based Sentiment Analysis
Bin Liang, Jiachen Du, Ruifeng Xu, Binyang Li and Hejiao Huang
Yes, we can! Mining Arguments in 50 Years of US Presidential Campaign Debates
Shohreh Haddadan, Elena Cabrio and Serena Villata

An Empirical Study of Span Representations in Argumentation Structure Parsing
Tatsuki Kuribayashi, Hiroki Ouchi, Naoya Inoue, Paul Reisert, Toshinori Miyoshi, Jun Suzuki andKentaro Inui

[Textual Inference and Other Areas of Semantics]

Simple and Effective Text Matching with Richer Alignment Features
Runqi Yang, Jianhai Zhang, Xing Gao, Feng Ji and Haiqing Chen

Learning Attention-based Embeddings for Relation Prediction in Knowledge Graphs
Deepak Nathani, Jatin Chauhan, Charu Sharma and Manohar Kaul

Neural Network Alignment for Sentential Paraphrases
Jessica Ouyang and Kathy McKeown

Duality of Link Prediction and Entailment Graph Induction
Mohammad Javad Hosseini, Shay B. Cohen, Mark Johnson and Mark Steedman

A Cross-Sentence Latent Variable Model for Semi-Supervised Text Sequence Matching
Jihun Choi, Taeuk Kim and Sang-goo Lee

COMET: Commonsense Transformers for Automatic Knowledge Graph Construction
Antoine Bosselut, Hannah Rashkin, Maarten Sap, Chaitanya Malaviya, Asli Celikyilmaz and Yejin Choi

Detecting Subevents using Discourse and Narrative Features
Mohammed Aldawsari and Mark Finlayson

HellaSwag: Can a Machine Really Finish Your Sentence?
Rowan Zellers, Ari Holtzman, Yonatan Bisk, Ali Farhadi and Yejin Choi

Unified Semantic Parsing with Weak Supervision
Priyanka Agrawal, Ayushi Dalmia, Parag Jain, Abhishek Bansal, Ashish Mittal and Karthik Sankaranarayanan

Every Child Should Have Parents: A Taxonomy Refinement Algorithm Based on Hyperbolic Term Embeddings
Rami Aly, Shantanu Acharya, Alexander Ossa, Arne Köhn, Chris Biemann and Alexander Panchenko

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Wednesday, July 31, 2019 (continued)

Learning to Rank for Plausible Plausibility
Zhongyang Li, Tongfei Chen and Benjamin Van Durme

Generalized Tuning of Distributional Word Vectors for Monolingual and Cross-Lingual Lexical Entailment
Goran Glavaš and Ivan Vulić

Attention Is (not) All You Need for Commonsense Reasoning
Tassilo Klein and Moin Nabi

A Surprisingly Robust Trick for the Winograd Schema Challenge
Vid Kocijan, Ana-Maria Cretu, Oana-Maria Camburu, Yordan Yordanov and Thomas Lukasiewicz

10:30–12:10 Student Research Workshop Poster Session 3

12:10–13:50 Lunch

13:50–15:30 Session 7A: Generation 2

13:50–14:10 Coherent Comments Generation for Chinese Articles with a Graph-to-Sequence Model
Wei Li, Jingjing Xu, Yancheng He, ShengLi Yan, Yunfang Wu and Xu Sun

14:10–14:30 Interconnected Question Generation with Coreference Alignment and Conversation Flow Modeling
Yifan Gao, Piji Li, Irwin King and Michael R. Lyu

14:30–14:50 Cross-Lingual Training for Automatic Question Generation
Vishwajeet Kumar, Nitish Joshi, Arijit Mukherjee, Ganesh Ramakrishnan and Preethi Jyothi

14:50–15:10 A Hierarchical Reinforced Sequence Operation Method for Unsupervised Text Style Transfer
Chen Wu, Xuancheng Ren, Fuli Luo and Xu Sun

15:10–15:30 Handling Divergent Reference Texts when Evaluating Table-to-Text Generation
Bhuwan Dhingra, Manaal Faruqui, Ankur Parikh, Ming-Wei Chang, Dipanjan Das and William Cohen
13:50–15:30 Session 7B: Question Answering 3

13:50–14:10 \textit{Unsupervised Question Answering by Cloze Translation}  
Patrick Lewis, Ludovic Denoyer and Sebastian Riedel

14:10–14:30 \textit{MultiQA: An Empirical Investigation of Generalization and Transfer in Reading Comprehension}  
Alon Talmor and Jonathan Berant

14:30–14:50 \textit{Simple and Effective Curriculum Pointer-Generator Networks for Reading Comprehension over Long Narratives}  
Yi Tay, Shuohang Wang, Anh Tuan Luu, Jie Fu, Minh C. Phan, Xingdi Yuan, Jinfeng Rao, Siu Cheung Hui and Aston Zhang

14:50–15:10 \textit{Explain Yourself! Leveraging Language Models for Commonsense Reasoning}  
Nazneen Fatema Rajani, Bryan McCann, Caiming Xiong and Richard Socher

15:10–15:30 \textit{Interpretable Question Answering on Knowledge Bases and Text}  
Alona Sydorova, Nina Poerner and Benjamin Roth

13:50–15:30 Session 7C: Multilinguality

13:50–14:10 \textit{A Resource-Free Evaluation Metric for Cross-Lingual Word Embeddings Based on Graph Modularity}  
Yoshinari Fujinuma, Jordan Boyd-Graber and Michael J. Paul

14:10–14:30 \textit{Multilingual and Cross-Lingual Graded Lexical Entailment}  
Ivan Vulić, Simone Paolo Ponzetto and Goran Glavaš

14:30–14:50 \textit{What Kind of Language Is Hard to Language-Model?}  
Sebastian J. Mielke, Ryan Cotterell, Kyle Gorman, Brian Roark and Jason Eisner

14:50–15:03 \textit{Analyzing the Limitations of Cross-lingual Word Embedding Mappings}  
Aitor Ormazabal, Mikel Artetxe, Gorka Labaka, Aitor Soroa and Eneko Agirre

15:03–15:16 \textit{How Multilingual is Multilingual BERT?}  
Telmo Pires, Eva Schlinger and Dan Garrette
Wednesday, July 31, 2019 (continued)

15:16–15:29  Bilingual Lexicon Induction through Unsupervised Machine Translation  
Mikel Artetxe, Gorka Labaka and Eneko Agirre

13:50–15:30  Session 7D: Social Media 2

Jichuan Zeng, Jing Li, Yulan He, Cuiyun Gao, Michael R. Lyu and Irwin King

14:10–14:30  Automatically Identifying Complaints in Social Media  
Daniel Preotiuc-Pietro, Mihaela Gaman and Nikolaos Aletras

14:30–14:50  TWEETQA: A Social Media Focused Question Answering Dataset  
Wenhan Xiong, Jiawei Wu, Hong Wang, Vivek Kulkarni, Mo Yu, Shiyu Chang, Xiaoxiao Guo and William Yang Wang

14:50–15:10  Asking the Crowd: Question Analysis, Evaluation and Generation for Open Discussion on Online Forums  
Zi Chai, Xinyu Xing, Xiaojun Wan and Bo Huang

15:10–15:30  Tree LSTMs with Convolution Units to Predict Stance and Rumor Veracity in Social Media Conversations  
Sumeet Kumar and Kathleen Carley

13:50–15:30  Session 7E: Summarization 2

Xingxing Zhang, Furu Wei and Ming Zhou

14:10–14:30  Hierarchical Transformers for Multi-Document Summarization  
Yang Liu and Mirella Lapata

14:30–14:50  Abstractive Text Summarization Based on Deep Learning and Semantic Content Generalization  
Panagiotis Kouris, Georgios Alexandridis and Andreas Stafylopatis

14:50–15:03  Studying Summarization Evaluation Metrics in the Appropriate Scoring Range  
Maxime Peyrard

15:03–15:16  Simple Unsupervised Summarization by Contextual Matching  
Jiawei Zhou and Alexander Rush
Wednesday, July 31, 2019 (continued)

15:16–15:29  Generating Summaries with Topic Templates and Structured Convolutional Decoders
Laura Perez-Beltrachini, Yang Liu and Mirella Lapata


13:50–14:10  Morphological Irregularity Correlates with Frequency
Shijie Wu, Ryan Cotterell and Timothy O’Donnell

14:10–14:30  Like a Baby: Visually Situated Neural Language Acquisition
Alexander Ororbia, Ankur Mali, Matthew Kelly and David Reitter

14:30–14:50  Relating Simple Sentence Representations in Deep Neural Networks and the Brain
Sharmistha Jat, Hao Tang, Partha Talukdar and Tom Mitchell

14:50–15:10  Modeling Affirmative and Negated Action Processing in the Brain with Lexical and Compositional Semantic Models
Vesna Djokic, Jean Maillard, Luana Bulat and Ekaterina Shutova

15:10–15:30  Word-order Biases in Deep-agent Emergent Communication
Rahma Chaabouni, Eugene Kharitonov, Alessandro Lazaric, Emmanuel Dupoux and Marco Baroni

13:50–15:30  Poster Session 7
[Information Extraction and Text Mining]

NNE: A Dataset for Nested Named Entity Recognition in English Newswire
Nicky Ringland, Xiang Dai, Ben Hachey, Sarvnaz Karimi, Cecile Paris and James R. Curran

Sequence-to-Nuggets: Nested Entity Mention Detection via Anchor-Region Networks
Hongyu Lin, Yaojie Lu, Xianpei Han and Le Sun

Improving Textual Network Embedding with Global Attention via Optimal Transport
Liqun Chen, Guoyin Wang, Chenyang Tao, Dinghan Shen, Pengyu Cheng, Xinyuan Zhang, Wenlin Wang, Yizhe Zhang and Lawrence Carin

Identification of Tasks, Datasets, Evaluation Metrics, and Numeric Scores for Scientific Leaderboards Construction
Yufang Hou, Charles Jochim, Martin Gleize, Francesca Bonin and Debasis Ganguly

Scaling up Open Tagging from Tens to Thousands: Comprehension Empowered Attribute Value Extraction from Product Title
Huimin Xu, Wenting Wang, Xin Mao, Xinyu Jiang and Man Lan

Incorporating Linguistic Constraints into Keyphrase Generation
Jing Zhao and Yuxiang Zhang

A Unified Multi-task Adversarial Learning Framework for Pharmacovigilance Mining
Shweta Yadav, Asif Ekbal, Sriparna Saha and Pushpak Bhattacharyya

Quantity Tagger: A Latent-Variable Sequence Labeling Approach to Solving Addition-Subtraction Word Problems
Yanyan Zou and Wei Lu

A Deep Reinforced Sequence-to-Set Model for Multi-Label Classification
Pengcheng Yang, Fuli Luo, Shuming Ma, Junyang Lin and Xu Sun

Joint Slot Filling and Intent Detection via Capsule Neural Networks
Chenwei Zhang, Yaliang Li, Nan Du, Wei Fan and Philip Yu

Neural Aspect and Opinion Term Extraction with Mined Rules as Weak Supervision
Hongliang Dai and Yangqiu Song
Cost-sensitive Regularization for Label Confusion-aware Event Detection
Hongyu Lin, Yaojie Lu, Xianpei Han and Le Sun

Exploring Pre-trained Language Models for Event Extraction and Generation
Sen Yang, Dawei Feng, Linbo Qiao, Zhigang Kan and Dongsheng Li

Improving Open Information Extraction via Iterative Rank-Aware Learning
Zhengbao Jiang, Pengcheng Yin and Graham Neubig

Towards Improving Neural Named Entity Recognition with Gazetteers
Tianyu Liu, Jin-Ge Yao and Chin-Yew Lin

Span-Level Model for Relation Extraction
Kalpit Dixit and Yaser Al-Onaizan

[Tagging, Chunking, Syntax and Parsing]

Enhancing Unsupervised Generative Dependency Parser with Contextual Information
Wenjuan Han, Yong Jiang and Kewei Tu

Neural Architectures for Nested NER through Linearization
Jana Straková, Milan Straka and Jan Hajic

Online Infix Probability Computation for Probabilistic Finite Automata
Marco Cognetta, Yo-Sub Han and Soon Chan Kwon

How to Best Use Syntax in Semantic Role Labelling
Yufei Wang, Mark Johnson, Stephen Wan, Yifang Sun and Wei Wang

PTB Graph Parsing with Tree Approximation
Yoshihide Kato and Shigeki Matubara

Sequence Labeling Parsing by Learning across Representations
Michalina Strzyz, David Vilares and Carlos Gómez-Rodriguez
A Prism Module for Semantic Disentanglement in Name Entity Recognition  
Kun Liu, Shen Li, Daqi Zheng, Zhengdong Lu, Sheng Gao and Si Li

Label-Agnostic Sequence Labeling by Copying Nearest Neighbors  
Sam Wiseman and Karl Stratos

[Dialogue and Interactive Systems]

Towards Empathetic Open-domain Conversation Models: A New Benchmark and Dataset  
Hannah Rashkin, Eric Michael Smith, Margaret Li and Y-Lan Boureau

Know More about Each Other: Evolving Dialogue Strategy via Compound Assessment  
Siqi Bao, Huang He, Fan Wang, Rongzhong Lian and Hua Wu

Training Neural Response Selection for Task-Oriented Dialogue Systems  
Matthew Henderson, Ivan Vulić, Daniela Gerz, Iñigo Casanueva, Pawel Budzianowski, Sam Coope, Georgios Spithourakis, Tsung-Hsien Wen, Nikola Mrkšić and Pei-Hao Su

Collaborative Dialogue in Minecraft  
Anjali Narayan-Chen, Prashant Jayannavar and Julia Hockenmaier

Neural Response Generation with Meta-words  
Can Xu, Wei Wu, Chongyang Tao, Huang Hu, Matt Schuerman and Ying Wang

Conversing by Reading: Contentful Neural Conversation with On-demand Machine Reading  
Lianhui Qin, Michel Galley, Chris Brockett, Xiaodong Liu, Xiang Gao, Bill Dolan, Yejin Choi and Jianfeng Gao

Ordinal and Attribute Aware Response Generation in a Multimodal Dialogue System  
Hardik Chauhan, Mauajama Firdaus, Asif Ekbal and Pushpak Bhattacharyya

Memory Consolidation for Contextual Spoken Language Understanding with Dialogue Logistic Inference  
He Bai, Yu Zhou, Jiajun Zhang and Chengqing Zong

Personalizing Dialogue Agents via Meta-Learning  
Andrea Madotto, Zhaojiang Lin, Chien-Sheng Wu and Pascale Fung
Reading Turn by Turn: Hierarchical Attention Architecture for Spoken Dialogue Comprehension
Zhengyuan Liu and Nancy Chen

A Novel Bi-directional Interrelated Model for Joint Intent Detection and Slot Filling
Haihong E, Peiqing Niu, Zhongfu Chen and Meina Song

Dual Supervised Learning for Natural Language Understanding and Generation
Shang-Yu Su, Chao-Wei Huang and Yun-Nung Chen

SUMBT: Slot-Utterance Matching for Universal and Scalable Belief Tracking
Hwaran Lee, Jinsik Lee and Tae-Yoon Kim

Robust Zero-Shot Cross-Domain Slot Filling with Example Values
Darsh Shah, Raghav Gupta, Amir Fayazi and Dilek Hakkani-Tur

Deep Unknown Intent Detection with Margin Loss
Ting-En Lin and Hua Xu

Modeling Semantic Relationship in Multi-turn Conversations with Hierarchical Latent Variables
Lei Shen, Yang Feng and Haolan Zhan

Rationally Reappraising ATIS-based Dialogue Systems
Jingcheng Niu and Gerald Penn
[Machine Learning]

Learning Latent Trees with Stochastic Perturbations and Differentiable Dynamic Programming
Caio Corro and Ivan Titov

Neural-based Chinese Idiom Recommendation for Enhancing Elegance in Essay Writing
Yuanchao Liu, Bo Pang and Bingquan Liu

Better Exploiting Latent Variables in Text Modeling
Canasai Kruengkrai

Misleading Failures of Partial-input Baselines
Shi Feng, Eric Wallace and Jordan Boyd-Graber

Soft Contextual Data Augmentation for Neural Machine Translation
Fei Gao, Jinhua Zhu, Lijun Wu, Yingce Xia, Tao Qin, Xueqi Cheng, Wengang Zhou and Tie-Yan Liu

Reversing Gradients in Adversarial Domain Adaptation for Question Deduplication and Textual Entailment Tasks
Anush Kamath, Sparsh Gupta and Vitor Carvalho

Towards Integration of Statistical Hypothesis Tests into Deep Neural Networks
Ahmad Aghaebrahimian and Mark Cieliebak

Depth Growing for Neural Machine Translation
Lijun Wu, Yiren Wang, Yingce Xia, Fei Tian, Fei Gao, Tao Qin, Jianhuang Lai and Tie-Yan Liu

Generating Fluent Adversarial Examples for Natural Languages
Huangzhao Zhang, Hao Zhou, Ning Miao and Lei Li

Towards Explainable NLP: A Generative Explanation Framework for Text Classification
Hui Liu, Qingyu Yin and William Yang Wang

Combating Adversarial Misspellings with Robust Word Recognition
Danish Pruthi, Bhuwan Dhingra and Zachary C. Lipton
Wednesday, July 31, 2019 (continued)

An Empirical Investigation of Structured Output Modeling for Graph-based Neural Dependency Parsing
Zhisong Zhang, Xuezhe Ma and Eduard Hovy

13:50–15:30 Demo Session 3

15:30–16:00 Break

16:00–17:40 Session 8A: Dialogue and Interactive Systems 3 - New Tasks

16:00–16:20 Observing Dialogue in Therapy: Categorizing and Forecasting Behavioral Codes
Jie Cao, Michael Tanana, Zac Imel, Eric Poitras, David Atkins and Vivek Srikumar

16:20–16:40 Multimodal Transformer Networks for End-to-End Video-Grounded Dialogue Systems
Hung Le, Doyen Sahoo, Nancy Chen and Steven Hoi

16:40–17:00 Target-Guided Open-Domain Conversation
Jianheng Tang, Tiancheng Zhao, Chenyan Xiong, Xiaodan Liang, Eric Xing and Zhiting Hu

17:00–17:20 Persuasion for Good: Towards a Personalized Persuasive Dialogue System for Social Good
Xuewei Wang, Weiyang Shi, Richard Kim, Yoojung Oh, Sijia Yang, Jingwen Zhang and Zhou Yu

17:20–17:40 Improving Neural Conversational Models with Entropy-Based Data Filtering
Richárd Csáky, Patrik Purgai and Gábor Recski
Wednesday, July 31, 2019 (continued)

16:00–17:40 Session 8B: Word-level Semantics 2

16:00–16:20 Zero-shot Word Sense Disambiguation using Sense Definition Embeddings
Sawan Kumar, Sharmistha Jat, Karan Saxena and Partha Talukdar

Daniel Loureiro and Alípio Jorge

16:40–17:00 Word2Sense: Sparse Interpretable Word Embeddings
Abhishek Panigrahi, Harsha Vardhan Simhadri and Chiranjib Bhattacharyya

17:00–17:20 Modeling Semantic Compositionality with Sememe Knowledge
Fanchao Qi, Junjie Huang, Chenghao Yang, Zhiyuan Liu, Xiao Chen, Qun Liu and Maosong Sun

17:20–17:40 Predicting Humorousness and Metaphor Novelty with Gaussian Process Preference Learning
Edwin Simpson, Erik-Lân Do Dinh, Tristan Miller and Iryna Gurevych

16:00–17:40 Session 8C: Resources and Evaluation

16:00–16:20 Empirical Linguistic Study of Sentence Embeddings
Katarzyna Krasnowska-Kieraś and Alina Wróblewska

16:20–16:40 Probing for Semantic Classes: Diagnosing the Meaning Content of Word Embeddings
Yadollah Yaghoobzadeh, Katharina Kann, T. J. Hazen, Eneko Agirre and Hinrich Schütze

16:40–17:00 Deep Neural Model Inspection and Comparison via Functional Neuron Pathways
James Fiacco, Samridhi Choudhary and Carolyn Rose

17:00–17:13 Collocation Classification with Unsupervised Relation Vectors
Luis Espinosa Anke, Steven Schockaert and Leo Wanner

17:13–17:26 Corpus-based Check-up for Thesaurus
Natalia Loukacheviitch
Wednesday, July 31, 2019 (continued)

17:26–17:39  Confusionset-guided Pointer Networks for Chinese Spelling Check
Dingmin Wang, Yi Tay and Li Zhong

16:00–17:40  Session 8D: Machine Translation 4

16:00–16:20  Generalized Data Augmentation for Low-Resource Translation
Mengzhou Xia, Xiang Kong, Antonios Anastasopoulos and Graham Neubig

16:20–16:40  [TACL] Attention-Passing Models for Robust and Data-Efficient End-to-End Speech Translation
Matthias Sperber, Graham Neubig, Jan Niehues and Alex Waibel

16:40–17:00  Analyzing Multi-Head Self-Attention: Specialized Heads Do the Heavy Lifting, the Rest Can Be Pruned
Elena Voita, David Talbot, Fedor Moiseev, Rico Sennrich and Ivan Titov

17:00–17:13  Better OOV Translation with Bilingual Terminology Mining
Matthias Huck, Viktor Hangya and Alexander Fraser

17:13–17:26  Simultaneous Translation with Flexible Policy via Restricted Imitation Learning
Baigong Zheng, Renjie Zheng, Mingbo Ma and Liang Huang

17:26–17:39  Target Conditioned Sampling: Optimizing Data Selection for Multilingual Neural Machine Translation
Xinyi Wang and Graham Neubig

16:00–17:40  Session 8E: Information Extraction and Text Mining 4

16:00–16:20  Adversarial Learning of Privacy-Preserving Text Representations for De-Identification of Medical Records
Max Friedrich, Arne Köhn, Gregor Wiedemann and Chris Biemann

16:20–16:40  Merge and Label: A Novel Neural Network Architecture for Nested NER
Joseph Fisher and Andreas Vlachos

16:40–17:00  Low-resource Deep Entity Resolution with Transfer and Active Learning
Jungo Kasai, Kun Qian, Sairam Gurajada, Yunyao Li and Lucian Popa

17:00–17:13  A Semi-Markov Structured Support Vector Machine Model for High-Precision Named Entity Recognition
Ravneet Arora, Chen-Tse Tsai, Ketevan Tsereteli, Prabhanjan Kambadur and Yi Yang
Wednesday, July 31, 2019 (continued)

17:13–17:26 Using Human Attention to Extract Keyphrase from Microblog Post
Yingyi Zhang and Chengzhi Zhang

17:26–17:39 Model-Agnostic Meta-Learning for Relation Classification with Limited Supervision
Abiola Obamuyide and Andreas Vlachos

16:00–17:40 Session 8F: Machine Learning 5

16:00–16:20 Variational Pretraining for Semi-supervised Text Classification
Suchin Gururangan, Tam Dang, Dallas Card and Noah A. Smith

16:20–16:40 Task Refinement Learning for Improved Accuracy and Stability of Unsupervised Domain Adaptation
Yftah Ziser and Roi Reichart

16:40–17:00 Optimal Transport-based Alignment of Learned Character Representations for String Similarity
Derek Tam, Nicholas Monath, Ari Kobren, Aaron Traylor, Rajarshi Das and Andrew McCallum

17:00–17:13 The Referential Reader: A Recurrent Entity Network for Anaphora Resolution
Fei Liu, Luke Zettlemoyer and Jacob Eisenstein

17:13–17:26 Interpolated Spectral NGram Language Models
Ariadna Quattoni and Xavier Carreras

17:26–17:39 BAM! Born-Again Multi-Task Networks for Natural Language Understanding
Kevin Clark, Minh-Thang Luong, Urvashi Khandelwal, Christopher D. Manning and Quoc V. Le
16:00–17:40 Poster Session 8

[Generation]

Curate and Generate: A Corpus and Method for Joint Control of Semantics and Style in Neural NLG
Shereen Oraby, Vrindavan Harrison, Abteen Ebrahimi and Marilyn Walker

Automated Chess Commentator Powered by Neural Chess Engine
Hongyu Zang, Zhiwei Yu and Xiaojun Wan

Barack’s Wife Hillary: Using Knowledge Graphs for Fact-Aware Language Modeling
Robert Logan, Nelson F. Liu, Matthew E. Peters, Matt Gardner and Sameer Singh

Controllable Paraphrase Generation with a Syntactic Exemplar
Mingda Chen, Qingming Tang, Sam Wiseman and Kevin Gimpel

Towards Comprehensive Description Generation from Factual Attribute-value Tables
Tianyu Liu, Fuli Luo, Pengcheng Yang, Wei Wu, Baobao Chang and Zhifang Sui

Style Transformer: Unpaired Text Style Transfer without Disentangled Latent Representation
Ning Dai, Jianze Liang, Xipeng Qiu and Xuanjing Huang

Generating Sentences from Disentangled Syntactic and Semantic Spaces
Yu Bao, Hao Zhou, Shujian Huang, Lei Li, Lili Mou, Olga Vechtomova, Xin-yu Dai and Jiajun Chen

Learning to Control the Fine-grained Sentiment for Story Ending Generation
Fuli Luo, Damai Dai, Pengcheng Yang, Tianyu Liu, Baobao Chang, Zhifang Sui and Xu Sun

Self-Attention Architectures for Answer-Agnostic Neural Question Generation
Thomas Scialom, Benjamin Piwowarski and Jacopo Staiano

Unsupervised Paraphrasing without Translation
Aurko Roy and David Grangier
Storyboarding of Recipes: Grounded Contextual Generation
Khyathi Chandu, Eric Nyberg and Alan W Black

Negative Lexically Constrained Decoding for Paraphrase Generation
Tomoyuki Kajiwara

Large-Scale Transfer Learning for Natural Language Generation
Sergey Golovanov, Rauf Kurbanov, Sergey Nikolenko, Kyryl Truskovskyi, Alexander Tselousov and Thomas Wolf

Automatic Grammatical Error Correction for Sequence-to-sequence Text Generation: An Empirical Study
Tao Ge, Xingxing Zhang, Furu Wei and Ming Zhou

[Question Answering]

Improving the Robustness of Question Answering Systems to Question Paraphrasing
Wee Chung Gan and Hwee Tou Ng

Latent Retrieval for Weakly Supervised Open Domain Question Answering
Kenton Lee, Ming-Wei Chang and Kristina Toutanova

Multi-hop Reading Comprehension through Question Decomposition and Rescoring
Sewon Min, Victor Zhong, Luke Zettlemoyer and Hannaneh Hajishirzi

Combining Knowledge Hunting and Neural Language Models to Solve the Winograd Schema Challenge
Ashok Prakash, Arpit Sharma, Arindam Mitra and Chitta Baral

Careful Selection of Knowledge to Solve Open Book Question Answering
Pratyay Banerjee, Kuntal Kumar Pal, Arindam Mitra and Chitta Baral

Learning Representation Mapping for Relation Detection in Knowledge Base Question Answering
Peng Wu, Shujian Huang, Rongxiang Weng, Zaixiang Zheng, Jianbing Zhang, Xiaohui Yan and Jiajun Chen
Dynamically Fused Graph Network for Multi-hop Reasoning
Lin Qiu, Yunxuan Xiao, Yanru Qu, Hao Zhou, Lei Li, Weinan Zhang and Yong Yu

NLPprolog: Reasoning with Weak Unification for Question Answering in Natural Language
Leon Weber, Pasquale Minervini, Jannes Münchmeyer, Ulf Leser and Tim Rocktäschel

Modeling Intra-Relation in Math Word Problems with Different Functional Multi-Head Attentions
Jierui Li, Lei Wang, Jipeng Zhang, Yan Wang, Bing Tian Dai and Dongxiang Zhang

Synthetic QA Corpora Generation with Roundtrip Consistency
Chris Alberti, Daniel Andor, Emily Pitler, Jacob Devlin and Michael Collins

Are Red Roses Red? Evaluating Consistency of Question-Answering Models
Marco Tulio Ribeiro, Carlos Guestrin and Sameer Singh

MC2: Multi-perspective Convolutional Cube for Conversational Machine Reading Comprehension
Xuanyu Zhang

[Multidisciplinary]

Time-Out: Temporal Referencing for Robust Modeling of Lexical Semantic Change
Haim Dubossarsky, Simon Hengchen, Nina Tahmasebi and Dominik Schlechtweg

Zonghan Yang, Yong Cheng, Yang Liu and Maosong Sun

Exploiting Sentential Context for Neural Machine Translation
Xing Wang, Zhaopeng Tu, Longyue Wang and Shuming Shi

Wetin dey with these comments? Modeling Sociolinguistic Factors Affecting Code-switching Behavior in Nigerian Online Discussions
Innocent Ndubuisi-Obi, Sayan Ghosh and David Jurgens

Accelerating Sparse Matrix Operations in Neural Networks on Graphics Processing Units
Arturo Argueta and David Chiang

An Automated Framework for Fast Cognate Detection and Bayesian Phylogenetic Inference in Computational Historical Linguistics
Taraka Rama and Johann-Mattis List

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[Document Analysis]

Sentence Centrality Revisited for Unsupervised Summarization
Hao Zheng and Mirella Lapata

Discourse Representation Parsing for Sentences and Documents
Jiangming Liu, Shay B. Cohen and Mirella Lapata

Inducing Document Structure for Aspect-based Summarization
Lea Frermann and Alexandre Klementiev

Incorporating Priors with Feature Attribution on Text Classification
Frederick Liu and Besim Avci

Matching Article Pairs with Graphical Decomposition and Convolutions
Bang Liu, Di Niu, Haojie Wei, Jinghong Lin, Yancheng He, Kunfeng Lai and Yu Xu

Hierarchical Transfer Learning for Multi-label Text Classification
Siddhartha Banerjee, Cem Akkaya, Francisco Perez-Sorrosal and Kostas Tsioutsioulklis

Bias Analysis and Mitigation in the Evaluation of Authorship Verification
Janek Bevendorff, Matthias Hagen, Benno Stein and Martin Potthast

Numeracy-600K: Learning Numeracy for Detecting Exaggerated Information in Market Comments
Chung-Chi Chen, Hen-Hsen Huang, Hiroya Takamura and Hsin-Hsi Chen

Large-Scale Multi-Label Text Classification on EU Legislation
Ilias Chalkidis, Emmanouil Fergadiotis, Prodromos Malakasiotis and Ion Androutsopoulos

Why Didn’t You Listen to Me? Comparing User Control of Human-in-the-Loop Topic Models
Varun Kumar, Alison Smith-Renner, Leah Findlater, Kevin Seppi and Jordan Boyd-Graber

Encouraging Paragraph Embeddings to Remember Sentence Identity Improves Classification
Tu Vu and Mohit Iyyer
Wednesday, July 31, 2019 (continued)

A Multi-Task Architecture on Relevance-based Neural Query Translation
Sheikh Muhammad Sarwar, Hamed Bonab and James Allan

Topic Modeling with Wasserstein Autoencoders
Feng Nan, Ran Ding, Ramesh Nallapati and Bing Xiang

[TACL] GILE: A Generalized Input-Label Embedding for Text Classification
Nikolaos Pappas and James Henderson

[Vision, Robotics, Multimodal, Grounding and Speech]

Dense Procedure Captioning in Narrated Instructional Videos
Botian Shi, Lei Ji, Yaobo Liang, Nan Duan, Peng Chen, Zhendong Niu and Ming Zhou

Latent Variable Model for Multi-modal Translation
Iacer Calixto, Miguel Rios and Wilker Aziz

Identifying Visible Actions in Lifestyle Vlogs
Oana Ignat, Laura Burdick, Jia Deng and Rada Mihalcea

A Corpus for Reasoning about Natural Language Grounded in Photographs
Alane Suhr, Stephanie Zhou, Ally Zhang, Iris Zhang, Huajun Bai and Yoav Artzi

Learning to Discover, Ground and Use Words with Segmental Neural Language Models
Kazuya Kawakami, Chris Dyer and Phil Blunsom

Pushkar Shukla, Carlos Elmadjian, Richika Sharan, Vivek Kulkarni, Matthew Turk and William Yang Wang

Symbolic Inductive Bias for Visually Grounded Learning of Spoken Language
Grzegorz Chrupała

Multi-step Reasoning via Recurrent Dual Attention for Visual Dialog
Zhe Gan, Yu Cheng, Ahmed Kholly, Linjie Li, Jingjing Liu and Jianfeng Gao

Lattice Transformer for Speech Translation
Pei Zhang, Niyu Ge, Boxing Chen and Kai Fan

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Informative Image Captioning with External Sources of Information
Sanqiang Zhao, Piyush Sharma, Tomer Levinboim and Radu Soricut

CoDraw: Collaborative Drawing as a Testbed for Grounded Goal-driven Communication
Jin-Hwa Kim, Nikita Kitaev, Xinlei Chen, Marcus Rohrbach, Byoung-Tak Zhang, Yuandong Tian, Dhruv Batra and Devi Parikh

Bridging by Word: Image Grounded Vocabulary Construction for Visual Captioning
Zhihao Fan, Zhongyu Wei, Siyuan Wang and Xuanjing Huang

Distilling Translations with Visual Awareness
Julia Iwe, Pranava Madhyastha and Lucia Specia

VIFIDEL: Evaluating the Visual Fidelity of Image Descriptions
Pranava Madhyastha, Josiah Wang and Lucia Specia

Ronghang Hu, Daniel Fried, Anna Rohrbach, Dan Klein, Trevor Darrell and Kate Saenko

Multimodal Transformer for Unaligned Multimodal Language Sequences
Yao-Hung Hubert Tsai, Shaojie Bai, Paul Pu Liang, J. Zico Kolter, Louis-Philippe Morency and Ruslan Salakhutdinov

Show, Describe and Conclude: On Exploiting the Structure Information of Chest X-ray Reports
Baoyu Jing, Zeya Wang and Eric Xing

Visual Story Post-Editing
Ting-Yao Hsu, Chieh-Yang Huang, Yen-Chia Hsu and Ting-Hao Huang

Multimodal Abstractive Summarization for How2 Videos
Shruti Palaskar, Jindrich Libovický, Spandana Gella and Florian Metze

Learning to Relate from Captions and Bounding Boxes
Sarthak Garg, Joel Ruben Antony Moniz, Anshu Aviral and Priyatham Bollimpalli

17:40–17:50 Short Break
Wednesday, July 31, 2019 (continued)

17:50–18:20  Best Paper Awards and Closing Remarks