EMNLP 2018

2018 Conference on Empirical Methods in Natural Language Processing

Proceedings of the Conference

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Preface by the General Chair

Welcome to EMNLP 2018 in Brussels, Belgium! I hope that EMNLP 2018 will be a memorable experience filled with exciting research presentations, outstanding keynote speakers, and many stimulating conversations with colleagues and friends, both old and new. In the evenings, I hope that you will explore the wonderful city of Brussels! Admire the historic buildings, visit great museums, and enjoy the Belgian cuisine.

EMNLP 2018 will have an extensive technical program that includes 14 workshops, 6 tutorials, 3 invited speakers, 351 long paper presentations, 198 short paper presentations, 10 TACL paper presentations, and 29 demos. I want to give special thanks to the Program Co-Chairs: David Chiang, Julia Hockenmaier, and Jun'ichi Tsujii. EMNLP 2018 received a record-breaking 2,231 valid submissions, a 48% increase over EMNLP 2017! Despite the massive volume of submissions, the PC chairs put tremendous care into every decision, big and small, and gracefully handled numerous inquiries and requests. Their commitment to a high-quality program was inspiring. Of course, the PC Chairs did not handle the workload alone: we all owe an enormous debt of gratitude to the 60 Area Chairs and 1,436 reviewers (yes, 1,400+ reviewers!) who took on the critical responsibilities of reviewing paper submissions and providing feedback to the program chairs. Thank you all!

The Demo Co-Chairs, Eduardo Blanco and Wei Lu, also had to handle an usually high workload. EMNLP 2018 received 77 demo submissions, which was a 40% increase over EMNLP 2017. They recruited an additional 150+ reviewers to assess the demo submissions, and managed the review process seamlessly. Thank you, Eduardo and Wei!

The EMNLP 2018 Workshop Co-Chairs, Marieke van Erp and Vincent Ng, and the EMNLP 2018 Tutorial Co-Chairs, Mausam and Lu Wang, oversaw the selection of workshops and tutorials and coordinated planning with the organizers. Many thanks to Marieke, Vincent, Mausam, and Lu for orchestrating terrific workshop and tutorial programs! And I am thrilled to have three exceptional NLP researchers as our keynote speakers: Johan Bos, Julia Hirschberg, and Gideon Mann.

For EMNLP 2018, we added two new initiatives to provide financial support to conference participants. We introduced *childcare grants* that offer financial support for childcare expenses incurred to participate in the conference. These childcare grants give families broad flexibility to utilize many different types of childcare services and arrangements. A giant thank you to Swapna Somasundaran for navigating this new terrain and drafting the policy guidelines, and to both Swapna and Aoife Cahill for overseeing the application and decision processes.

EMNLP 2018 also introduced travel scholarships for non-students to attend the conference. The non-student travel scholarships provide support to people with financial need who might otherwise not be able to participate in the conference. We created this initiative with an eye toward supporting researchers from historically under-representated regions and young researchers or others with limited financial means. I want to thank Anna Rumshisky and Hugo Van hamme for managing these new non-student travel scholarships, along with the student travel scholarship and volunteer applications.

Nitin Madnani deserves special thanks for taking charge of *both* the EMNLP 2018 web site and conference app, and doing a fantastic job. Nitin was a pleasure to work with, and incredibly responsive, answering emails impossibly fast and accommodating every request. Thanks also to our Publicity Chair, Mohit Iyyer, for advertising the conference on social media and elsewhere, and our Video Chair, Bonan Min, for handling the video recordings.

Managing the conference proceedings and compiling the handbook are extremely time-consuming and tedious jobs, but less visible to conference attendees, who only see the final products. Enormous

thanks to the Publication Chairs, Micha Elsner (junior chair) and Preethi Raghavan (senior chair), the Conference Handbook Chair, Kai-Wei Chang, the Handbook Advisor, Joachim Bingel, and the Handbook Proofreader, He He. They were truly a fantastic team!

And a huge thanks to the Local Organization Committee from KU Leuven: Marie-Francine Moens (chair), Dominique De Brabanter, Frieda Steurs, and Hugo Van hamme, as well as the Local Sponsorship Chair, Katrien Beuls from Vrije Universiteit Brussel. Their hard work and enthusiasm were key to making EMNLP 2018 a success! In addition, a large conference like EMNLP depends heavily on sponsorship, and I want to sincerely thank *all* of the EMNLP 2018 sponsors for their generous support!

I must also thank SIGDAT for their support throughout this past year. With extra thanks to Noah Smith, the SIGDAT Secretary-Treasurer and EMNLP liaison, for his support of our new initiatives, valuable feedback, and quick responses. Finally, I owe a huge debt of gratitude to Priscilla Rasmussen, who managed so many aspects of the conference that I can't even begin to name them. A heartfelt thanks to Priscilla for her hard work, sage advice, and for patiently answering an endless stream of questions from me, and many others.

And thanks to all of YOU for participating in EMNLP 2018! I hope you enjoy the conference and your time in Brussels!

EMNLP 2018 General Chair

Ellen Riloff, University of Utah, USA

Preface by the Program Committee Co-Chairs

Welcome to EMNLP 2018! This year's technical program consists of three invited talks, 224 oral presentations (including three papers appearing in the Transactions of the ACL), and 335 poster presentations (including seven papers appearing in TACL). To our knowledge, it's the largest NLP conference ever, and it would not have been possible without the help of our program committee members.

This year, we organized the program committee into eight broad areas. For each area, one of our amazing senior area chairs (Jordan Boyd-Graber, Xavier Carreras, Yejin Choi, Philipp Koehn, Alessandro Moschitti, Slav Petrov, Massimo Poesio, and Kam-Fai Wong) headed a team of several other area chairs (totaling 52 across all areas) and an army of reviewers (totaling 1,436 across all areas). We'd like to especially thank those reviewers who agreed to review a full load of papers, which turned out to be a bit heavier than expected!

2018 appears to have been the year of experimentation with new review forms, and EMNLP was no exception. We eliminated many of the traditional numerical ratings and divided up the free-form comments into a small number of separate free-response questions. We tried to make this new structure mirror the structure of a typical review, while encouraging more comprehensive reviewing.

Extrapolating exponentially from the past two years, we expected to receive about 1,800 submissions, but the eventual number exceeded our expectations at 2,231 (excluding empty and duplicate submissions). After removal of invalid submissions and some withdrawals, we sent 2,116 papers out for review. Despite the growing number of submissions, we tried to keep acceptance rates at the same level as past years. The acceptance statistics are shown below.

	Long	Short	Total	TACL
Submitted	1,376	855	2,231	–
Accepted as talk	140 (10.2%)	81 (9.5%)	221 (9.9%)	3
Accepted as poster	211 (15.3%)	117 (13.7%)	328 (14.7%)	7
Accepted (total)	351 (25.5%)	198 (23.2%)	549 (24.6%)	10

As in past years, three awards will be given for Best Long Paper, Best Short Paper, and Best Resource Paper. We solicited recommendations for awards from reviewers and area chairs. Following these recommendations, we sent 7 long papers, 5 short papers, and 5 resource papers to three committees chosen from among the area chairs. In the end, we selected two winners for Best Long Paper and one each for Best Short Paper and Best Resource Paper, all of which will be presented in a final plenary session.

We are delighted to have keynote addresses from three giants of our field: Johan Bos, on the future of computational semantics; Julia Hirschberg, on deception detection in speech; and Gideon Mann, on the use of NLP in finance.

In addition to our entire program committee, we would also like to give thanks to:

- Our general chair, Ellen Riloff,
- Priscilla Rasmussen,
- Last year's program chairs, Rebecca Hwa and Sebastian Riedel,
- Our local chair, Marie-Francine Moens, and the local organizing committee,
- Our web and publicity chairs, Nitin Madnani and Mohit Iyyer,
- Our publications chairs, Micha Elsner and Preethi Raghavan,
- Our handbook chair, Kai-Wei Chang,
- Rich Gerber and the technical support team at SoftConf.

Again, welcome! We hope that you enjoy this year's conference, and return home with new insights, ideas, and opportunities!

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We would like to recognize the following 100 reviewers with the Best Reviewer Award.

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Mourad Abbas, Muhammad Abdul-Mageed, Amjad Abu-Jbara, Oliver Adams, Heike Adel, Stergos Afantenos, Apoorv Agarwal, Željko Agić, Roee Aharoni, Chaitanya Ahuja, Zeynep Akata, Alan Akbik, Ahmet Aker, Cem Akkaya, Chris Alberti, Hanan Aldarmaki, Nikolaos Aletras, Afra Alishahi, Alexandre Allauzen, Tim Althoff, Bharat Ram Ambati, Waleed Ammar, Antonios Anastasopoulos, Jesse Anderton, Nicholas Andrews, Anietie Andy, Gabor Angeli, Marianna Apidianaki, Jun Araki, Kenji Araki, Yuki Arase, Ehsaneddin Asgari, Ramón Astudillo, Giuseppe Attardi, Eleftherios Avramidis, Amittai Axelrod, Wilker Aziz, Yoram Bachrach, Hessam Bagherinezhad, Fan Bai, Simon Baker, Mithun Balakrishna, Niranjan Balasubramanian, Tyler Baldwin, David Bamman, Rafael E. Banchs, Siddhartha Banerjee, Trapit Bansal, Roy Bar-Haim, Libby Barak, Alistair Baron, Marco Baroni, Alberto Barrón-Cedeño, Guntis Barzdins, Pierpaolo Basile, Valerio Basile, Joost Bastings, Riza Theresa Batista-Navarro, Vishwash Batra, Timo Baumann, Rachel Bawden, Frederic Bechet, Daniel Beck, Srikanta Bedathur, Núria Bel, Eric Bell, Kedar Bellare, Iz Beltagy, Anja Belz, Farah Benamara, Jonathan Berant, Taylor Berg-Kirkpatrick, Raffaella Bernardi, Nicola Bertoldi, Laurent Besacier, Steven Bethard, Chandra Bhagavatula, Suma Bhat, Archna Bhatia, Sumit Bhatia, Pushpak Bhattacharyya, Chris Biemann, Lidong Bing, Alexandra Birch, Yonatan Bisk, Johannes Bjerva, Jari Björne, Frédéric Blain, Eduardo Blanco, Su Lin Blodgett, Michael Bloodgood, Reihane Boghrati, Nikolay Bogoychev, Bernd Bohnet, Danushka Bollegala, Daniele Bonadiman, Francesca Bonin, Kalina Bontcheva, Georgeta Bordea, Alexey Borisov, Johan Bos, Antoine Bosselut, Jan A. Botha, Houda Bouamor, Fethi Bougares, Samuel Bowman, Ryan Boyd, Matko Bošnjak, Jonathan Brennan, Chris Brew, Chris Brockett, Austin Brockmeier, Thomas Brovelli (Meyer), Caroline Brun, Dominique Brunato, Paul Buitelaar, Florin Bulgarov, Stephan Busemann, Bill Byrne, Donna Byron, Benjamin Börschinger, José G. C. de Souza, Elena Cabrio, Aoife Cahill, Iacer Calixto, Jose Camacho-Collados, Erik Cambria, Nicola Cancedda, Marie Candito, Hailong Cao, Yuan Cao, Ziqiang Cao, Giuseppe Carenini, Francisco Casacuberta, Thiago Castro Ferreira, Daniel Cer, Mauro Cettolo, Soumen Chakrabarti, Yllias Chali, Yee Seng Chan, Muthu Kumar Chandrasekaran, Baobao Chang, Chia-Hui Chang, Yin-Wen Chang, Rajen Chatterjee, Snigdha Chaturvedi, Stergios Chatzikyriakidis, Wanxiang Che, Ciprian Chelba, Bin Chen, Boxing Chen, Chen Chen, Chung-Chi Chen, Danqi Chen, Huan-Yuan Chen, John Chen, Kaiping Chen, Kehai Chen, Muhao Chen, Tao Chen, Tongfei Chen, Wenhu Chen, Wenliang Chen, Xilun Chen, Yidong Chen, Yubo Chen, Yun-Nung Chen, Zhiyuan Chen, Jianpeng Cheng, Pu-Jen Cheng, Yong Cheng, Jackie Chi Kit Cheung, Jen-Tzung Chien, Hai Leong Chieu, Laura Chiticariu, Kyunghyun Cho, Eunsol Choi, Heeyoul

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seini, Yufang Hou, Eduard Hovy, Estevam Hruschka, Baotian Hu, Yuheng Hu, Zhiting Hu, Bo Huang, Guoping Huang, Haoran Huang, Hen-Hsen Huang, Lifu Huang, Minlie Huang, Po-Sen Huang, Ruihong Huang, Shujian Huang, Xiaojiang Huang, Xuanjing Huang, Zhongqiang Huang, Matthias Huck, Samar Husain, Rebecca Hwa, Jena D. Hwang, Seung-won Hwang, Ignacio Iacobacci, Adrian Iftene, Gonzalo Iglesias, Ryu Iida, Loring Ingraham, Naoya Inoue, Kentaro Inui, Takashi Inui, Radu Tudor Ionescu, Molly Ireland, Aminul Islam, Alexei V. Ivanov, Srinivasan Iyer, Mohit Iyyer, Kokil Jaidka, Prachi Jain, Adam Jatowt, Sujay Kumar Jauhar, Sébastien Jean, Laura Jehl, Yacine Jernite, Rahul Jha, Heng Ji, Yangfeng Ji, Robin Jia, Ping Jian, Hui Jiang, Jing Jiang, Jingtian Jiang, Meng Jiang, Wenbin Jiang, Antonio Jimeno Yepes, Yohan Jo, Anders Johannsen, Richard Johansson, Kristen Johnson, Kristiina Jokinen, Gareth Jones, Kenneth Joseph, Mandar Joshi, Shafiq Joty, Meizhi Ju, Marcin Junczys-Dowmunt, Preethi Jyothi, Gerhard Jäger, Nobuhiro Kaji, Herman Kamper, Pallika Kanani, Hiroshi Kanayama, Dongyeop Kang, Dimitri Kartsaklis, Arzoo Katiyar, Makoto P. Kato, Daisuke Kawahara, Hideto Kazawa, Chris Kedzie, Aniruddha Kembhavi, Casey Kennington, Mitesh M. Khapra, Huda Khayrallah, Douwe Kiela, Yuta Kikuchi, Halil Kilicoglu, Jin-Dong Kim, Jooyeon Kim, Najoung Kim, Seokhwan Kim, Suin Kim, Sun Kim, Sunghwan Mac Kim, Yoon Kim, Young-Bum Kim, Irwin King, Eliyahu Kiperwasser, Svetlana Kiritchenko, Nikita Kitaev, Judith Klavans, Alexandre Klementiev, Roman Klinger, Alistair Knott, Rebecca Knowles, Sosuke Kobayashi, Thomas Kober, Simon Kocbek, Kazunori Komatani, Rik Koncel-Kedziorski, Grzegorz Kondrak, Xiang Kong, Ioannis Konstas, Yannis Korkontzelos, Leila Kosseim, Lili Kotlerman, Zornitsa Kozareva, Mikhail Kozhevnikov, Julia Kreutzer, Jayant Krishnamurthy, Kriste Krstovski, Canasai Kruengkrai, Udo Kruschwitz, Germán Kruszewski, Lun-Wei Ku, Marco Kuhlmann, Roland Kuhn, Vivek Kulkarni, Shankar Kumar, Jonathan K. Kummerfeld, Gourab Kundu, Tsung-Ting Kuo, Sadao Kurohashi, Polina Kuznetsova, Maximilian Köper, Sandra Kübler, Majid Laali, Gorka Labaka, Wai Lam, Mathias Lambert, Patrik Lambert, Vasileios Lampos, Gerasimos Lampouras, Wuwei Lan, Ni Lao, Mirella Lapata, Romain Laroche, Jey Han Lau, Alon Lavie, Carolin Lawrence, Angeliki Lazaridou, Phong Le, Joseph Le Roux, Robert Leaman, Chiaying Lee, Hung-yi Lee, John Lee, Lin-shan Lee, Sungjin Lee, Yoong Keok Lee, Young-Suk Lee, Els Lefever, Tao Lei, Gaël Lejeune, Alessandro Lenci, Piroska Lendvai, Chee Wee (Ben) Leong, James Lester, Gregor Leusch, Effi Levi, Roger Levy, Baoli Li, Binyang Li, Cheng-Te Li, Chenliang Li, Haibo Li, Juanzi Li, Junhui Li, Junyi Jessy Li, Lei Li, Liangyou Li, Lishuang Li, Miles Li, Piji Li, Sujian Li, Xin Li, Xiujun Li, Yanen Li, Yunyao Li, Zhenghua Li, Zhixing Li, Maria Liakata, Chen Liang, Paul Pu Liang, Ming Liao, Xiangwen Liao, Anne-Laure Ligozat, Nut Limsopatham, Bill Yuchen Lin, Chenghua Lin, Chuan-Jie Lin, Dekang Lin, Xi Victoria Lin, Xiao Ling, Tal Linzen, Pierre Lison, Marina Litvak, Bing Liu, Changsong Liu, Fei Liu, Jiangming Liu, Jingjing Liu, Kai Liu, Kang Liu, Lemao Liu, Liyuan Liu, Qian Liu, Shujie Liu, Xiaodong Liu, Yang Liu, Yang Liu, Yiqun Liu, Zhengzhong Liu, Zhiyuan Liu, Nikola Ljubešić, Elena Lloret, José Lopes, Oier Lopez de Lacalle, Aurelio Lopez-Lopez, Annie Louis, Ryan Lowe, Sharid Loáiciga, Qin Lu, Wei Lu, Yi Luan, Wencan Luo, Zhunchen Luo, Anh Tuan Luu, Teresa Lynn, Chunchuan Lyu, Jing Ma, Mingbo Ma, Shuming Ma, Wei-Yun Ma, Xuezhe Ma, Klaus Macherey, Wolfgang Macherey, Pranava Swaroop Madhyastha, Walid Magdy, Wolfgang Maier, Jean Maillard, Peter Makarov, Prodromos Malakasiotis, Alfredo Maldonado, Andreas Maletti, Igor Malioutov, Shervin Malmasi, Radhika Mamidi, Suresh Manandhar, Gideon Mann, Ana Marasovic, Daniel Marcu, Mitchell Marcus, Alex Marin, André F. T. Martins, Bruno Martins, David Martins de Matos, Sebastian Martschat, Héctor Martínez Alonso, Marco Matassoni, Prashant Mathur, Yuichiroh Matsubayashi, Yuji Matsumoto, Takuya Matsuzaki, Austin Matthews, Abhinav Maurya, Arne Mauser, Jonathan May, Stephen Mayhew, Diana Maynard, Karen Mazidi, David McAllester, Diana McCarthy, David McClosky, John Philip McCrae, Stephen McGregor, Tara McIntosh, Kathy McKeown, Hongyuan Mei, Yelena Mejova, Pablo Mendes, Arul Menezes, Fandong Meng,

Helen Meng, Mohsen Mesgar, Florian Metze, Haitao Mi, Yishu Miao, Slava Mikhaylov, Timothy Miller, Tristan Miller, Bonan Min, Anne-Lyse Minard, Pasquale Minervini, Michael Minock, Paramita Mirza, Abhijit Mishra, Dipendra Misra, Jeff Mitchell, Akiva Miura, Daichi Mochihashi, Ashutosh Modi, Muhidin Mohamed, Saif Mohammad, Michael Mohler, Luis Gerardo Mojica de la Vega, Manuel Montes, Christof Monz, Taesun Moon, Roser Morante, Véronique Moriceau, Hajime Morita, Alessandro Moschitti, Dana Movshovitz-Attias, Nikola Mrkšić, Tingting Mu, Animesh Mukherjee, Dragos Munteanu, Yugo Murawaki, Kenton Murray, Sung-Hyon Myaeng, Maria Nadejde, Masaaki Nagata, Ryo Nagata, Ajay Nagesh, Tetsuji Nakagawa, Mikio Nakano, Yukiko Nakano, Ndapa Nakashole, Hideki Nakayama, Preslav Nakov, Jason Naradowsky, Karthik Narasimhan, Alexis Nasr, Roberto Navigli, Adeline Nazarenko, Mark-Jan Nederhof, Matteo Negri, Aida Nematzadeh, Goran Nenadic, Yael Netzer, Graham Neubig, Guenter Neumann, Dominick Ng, Hwee Tou Ng, Jun-Ping Ng, Vincent Ng, Minh-Quoc Nghiem, Axel-Cyrille Ngonga Ngomo, Thien Huu Nguyen, Truc-Vien T. Nguyen, Viet-An Nguyen, Jian-Yun Nie, Jan Niehues, Ivelina Nikolova, Nobal Bikram Niraula, Xing Niu, Joakim Nivre, Hiroshi Noji, Thanapon Noraset, Joel Nothman, Pierre Nugues, Aurélie Névéol, Brendan O'Connor, Tim O'Gorman, Yusuke Oda, Kemal Oflazer, Jong-Hoon Oh, Kiyonori Ohtake, Naoaki Okazaki, Manabu Okumura, Constantin Orasan, Vicente Ordonez, Petya Osenova, Simon Ostermann, Myle Ott, Katja Ovchinnikova, Diarmuid Ó Séaghdha, Arzucan Özgür, Lilja Øvrelid, Ulrike Pado, Martha Palmer, Joao Palotti, Shimei Pan, Xiaoman Pan, Alexander Panchenko, Alexandros Papangelis, Nikos Papasarantopoulos, Nikolaos Pappas, Ankur Parikh, Niki Parmar, Patrick Paroubek, Carla Parra Escartín, Tommaso Pasini, Siddharth Patwardhan, Michael J. Paul, Adam Pauls, Ellie Pavlick, Adam Pease, Baolin Peng, Hao Peng, Haoruo Peng, Nanyun Peng, Xiaochang Peng, Sergio Penkale, Ethan Perez, Julien Perez, Gabriele Pergola, Sandro Pezzelle, Karl Pichotta, Olivier Pietquin, Mohammad Taher Pilehvar, Manfred Pinkal, Juan Pino, Yuval Pinter, Barbara Plank, Emmanouil Antonios Platanios, Julien Plu, Massimo Poesio, Adam Poliak, Edoardo Maria Ponti, Simone Paolo Ponzetto, Andrei Popescu-Belis, Maja Popović, Fred Popowich, Soujanya Poria, Christopher Potts, Amir Pouran Ben Veyseh, Forough Poursabzi-Sangdeh, Vinodkumar Prabhakaran, Shrimai Prabhumoye, Daniel Preoţiuc-Pietro, Emily Prud'hommeaux, Laurent Prévot, Jay Pujara, Matthew Purver, Valentina Pyatkin, Sampo Pyysalo, Verónica Pérez-Rosas, Ashequl Qadir, Jing Qian, Longhua Qian, Lianhui Qin, Pengda Qin, Long Qiu, Minghui Qiu, Lizhen Qu, Meng Qu, Chris Quirk, Ella Rabinovich, Alessandro Raganato, Altaf Rahman, Taraka Rama, Bhuvana Ramabhadran, Vikram Ramanarayanan, Maya Ramanath, Carlos Ramisch, Delip Rao, Sudha Rao, Mohammad Sadegh Rasooli, Pushpendre Rastogi, Sagnik Ray Choudhury, Simon Razniewski, Ines Rehbein, Marek Rei, Ehud Reiter, Steffen Remus, Gary Ren, Zhaochun Ren, Ludovic Rheault, Corentin Ribeyre, Giuseppe Riccardi, Matthew Richardson, Mark Riedl, Martin Riedl, Jason Riesa, German Rigau, Fabio Rinaldi, Brian Riordan, Kirk Roberts, Tim Rocktäschel, Pedro Rodriguez, Ina Roesiger, Marcus Rohrbach, Oleg Rokhlenko, Stephen Roller, Salvatore Romeo, Sara Rosenthal, Alessandro Rossi, Paolo Rosso, Benjamin Roth, Michael Roth, Sascha Rothe, Subhro Roy, Alla Rozovskaya, Sebastian Ruder, Rachel Rudinger, Frank Rudzicz, Vasile Rus, Alexander Rush, Irene Russo, Delia Rusu, Attapol Rutherford, Derek Ruths, Ashish Sabharwal, Mrinmaya Sachan, Kugatsu Sadamitsu, Fatiha Sadat, Markus Saers, Kenji Sagae, Rishiraj Saha Roy, Magnus Sahlgren, Sunil Sahu, Hassan Sajjad, Keisuke Sakaguchi, Tetsuya Sakai, Sakriani Sakti, Mohammad Salameh, Elizabeth Salesky, Avneesh Saluja, Rajhans Samdani, Germán Sanchis-Trilles, Enrico Santus, Maarten Sap, Naomi Saphra, Zahra Sarabi, Ryohei Sasano, Agata Savary, Hassan Sawaf, Asad Sayeed, Carolina Scarton, Odette Scharenborg, Tatjana Scheffler, Niko Schenk, David Schlangen, Jonathan Schler, Natalie Schluter, Allen Schmaltz, Helmut Schmid, Nathan Schneider, William Schuler, Björn Schuller, H. Andrew Schwartz, Lane Schwartz, Roy Schwartz, Stephanie Schwartz, Holger Schwenk, Djamé Seddah, Frederique Segond, Satoshi Sekine, Ethan Selfridge, Jean Senellart, Rico Sennrich, Minjoon Seo,

Christophe Servan, Burr Settles, Lei Sha, Izhak Shafran, Kashif Shah, Samira Shaikh, Rebecca Sharp, Lanbo She, Shiqi Shen, Wade Shen, Fiona Shen-Bayh, Baoxu Shi, Bei Shi, Bowen Shi, Xiaodong Shi, Hyopil Shin, Chaitanya Shivade, Avi Sil, Fabrizio Silvestri, Yanchuan Sim, Patrick Simianer, Dan Simonson, Kiril Simov, Sameer Singh, Steve Skiena, Neil Smalheiser, Sharon Small, Noah A. Smith, Parinaz Sobhani, Richard Socher, Artem Sokolov, Hyun-Je Song, Kaisong Song, Linfeng Song, Yan Song, Yang Song, Yangqiu Song, Radu Soricut, Aitor Soroa, Daniil Sorokin, Axel Soto, Lucia Specia, Matthias Sperber, Richard Sproat, Vivek Srikumar, Somayajulu Sripada, Shashank Srivastava, Miloš Stanojević, Mark Steedman, Josef Steinberger, Shane Steinert-Threlkeld, Pontus Stenetorp, Mark Stevenson, Suzanne Stevenson, Ian Stewart, Svetlana Stoyanchev, Veselin Stoyanov, Carlo Strapparava, Emma Strubell, Keh-Yih Su, Pei-Hao Su, Yu Su, Jinsong Su, Amarnag Subramanya, Katsuhito Sudoh, Alane Suhr, Elior Sulem, Md Arafat Sultan, Fei Sun, Huan Sun, Le Sun, Ming Sun, Mihai Surdeanu, Hisami Suzuki, Swabha Swayamdipta, Idan Szpektor, Jakub Szymanik, Felipe Sánchez-Martínez, Anders Søgaard, Jan Šnajder, Sanja Štajner, Hiroya Takamura, Sho Takase, David Talbot, Partha Talukdar, Akihiro Tamura, Chenhao Tan, Jiwei Tan, Niket Tandon, Duyu Tang, Jian Tang, Jiliang Tang, Jintao Tang, Siliang Tang, Chris Tanner, Xavier Tannier, Chongyang Tao, Fangbo Tao, Makarand Tapaswi, Simone Teufel, Kapil Thadani, Jesse Thomason, Fei Tian, Ran Tian, Jörg Tiedemann, Christoph Tillmann, Gaurav Singh Tomar, Nadi Tomeh, Marc Tomlinson, Sara Tonelli, Antonio Toral, Kentaro Torisawa, Shubham Toshniwal, Ke Tran, Isabel Trancoso, Rocco Tripodi, Adam Trischler, Chen-Tse Tsai, Richard Tzong-Han Tsai, Yuta Tsuboi, Yoshimasa Tsuruoka, Lifu Tu, Gokhan Tur, Marco Turchi, Ferhan Ture, Kateryna Tymoshenko, Oscar Täckström, Stefan Ultes, Lyle Ungar, Shyam Upadhyay, Olga Uryupina, Dmitry Ustalov, Masao Utiyama, Antonio Uva, Sowmya Vajjala, Tim Van de Cruys, Rob van der Goot, Lonneke van der Plas, Menno van Zaanen, Vincent Vandeghinste, David Vandyke, Sumithra Velupillai, Alakananda Vempala, Sriram Venkatapathy, Ashish Venugopal, Patrick Verga, Marc Verhagen, Yannick Versley, Guido Vetere, David Vilar, David Vilares, Aline Villavicencio, Andreas Vlachos, Rob Voigt, Svitlana Volkova, Ngoc Thang Vu, Thuy Vu, Ivan Vulić, Yogarshi Vyas, Byron Wallace, Matthew Walter, Stephen Wan, Alex Wang, Baoxun Wang, Chao Wang, Chenguang Wang, Chuan Wang, Daling Wang, Dingquan Wang, Houfeng Wang, Longyue Wang, Lu Wang, Mingxuan Wang, Quan Wang, Rui Wang, Shaojun Wang, Shuohang Wang, Wei Wang, Xiaolong Wang, Xin Wang, Xing Wang, Zhichun Wang, Zhiguo Wang, Zhongqing Wang, Leo Wanner, Nigel Ward, Zeerak Waseem, Shinji Watanabe, Nick Webb, Ingmar Weber, Julie Weeds, Furu Wei, Zhongyu Wei, Gerhard Weikum, David Weir, Yu Weiren, Ralph Weischedel, David Weiss, Dirk Weissenborn, Johannes Welbl, Charles Welch, Laura Wendlandt, Aaron Steven White, Michael Wiegand, John Wieting, Derry Tanti Wijaya, Jake Williams, Jason D Williams, Steven Wilson, Sam Wiseman, Guillaume Wisniewski, Travis Wolfe, Derek F. Wong, Tak-Lam Wong, Hua Wu, Jiawei Wu, Yunfang Wu, Zhaohui Wu, Joern Wuebker, Tong Xiao, Xinyan Xiao, Yanghua Xiao, Pengtao Xie, Deyi Xiong, Wenhan Xiong, Kun Xu, Ruifeng Xu, Tong Xu, Wei Xu, Wenduan Xu, Yadollah Yaghoobzadeh, Takehiro Yamamoto, Rui Yan, Baosong Yang, Bishan Yang, Diyi Yang, Liu Yang, Weiwei Yang, Yaqin Yang, Yi Yang, Yiben Yang, Zhilin Yang, Zichao Yang, Helen Yannakoudakis, Tae Yano, Jin-ge Yao, Wenlin Yao, Ziyu Yao, Mark Yatskar, Lana Yeganova, Wen-wai Yim, Seid Muhie Yimam, Pengcheng Yin, Qingyu Yin, Wenpeng Yin, Dani Yogatama, Naoki Yoshinaga, Masaharu Yoshioka, Dian Yu, Jianfei Yu, Kai Yu, Liang-Chih Yu, Mo Yu, Ning Yu, François Yvon, Roberto Zamparelli, Marcos Zampieri, Fabio Massimo Zanzotto, Rowan Zellers, Daojian Zeng, Jichuan Zeng, Xingshan Zeng, Chrysoula Zerva, Luke Zettlemoyer, Deniz Zeyrek, Ke Zhai, Biao Zhang, Congle Zhang, Dongdong Zhang, Hao Zhang, Jiajun Zhang, Jingyi Zhang, Lei Zhang, Meishan Zhang, Min Zhang, Min Zhang, Qi Zhang, Sheng Zhang, Wei-Nan Zhang, Xingxing Zhang, Yongfeng Zhang, Yuan Zhang, Yuchen Zhang, Yue Zhang, Yuhao Zhang, Bing Zhao, Dongyan Zhao, Hai Zhao, Jun Zhao, Kai Zhao, Lin Zhao, Sendong Zhao, Tiancheng

Zhao, Wayne Xin Zhao, Alisa Zhila, Victor Zhong, Guodong Zhou, Hao Zhou, Junsheng Zhou, Ming Zhou, Hao Zhu, Lixing Zhu, Muhua Zhu, Qi Zhu, Xiaodan Zhu, Yukun Zhu, Ayah Zirikly, Yftah Ziser, Michael Zock, Chengqing Zong.

Invited Speaker: Johan Bos, University of Groningen
The Moment of Meaning and the Future of Computational Semantics

Abstract: There are many recent advances in semantic parsing: we see a rising number of semantically annotated corpora and there is exciting technology (such as neural networks) to be explored. In this talk I will discuss what role computational semantics could play in future natural language processing applications (including fact checking and machine translation). I will argue that we should not just look at semantic parsing, but that things can get really interesting when we can use language-neutral meaning representations to draw (transparent) inferences. The main ideas will be exemplified by the parallel meaning bank, a new corpus comprising texts annotated with formal meaning representations for English, Dutch, German and Italian.

Bio: Johan Bos is Professor of Computational Semantics at the University of Groningen (Netherlands). He received his doctorate from the Computational Linguistics Department at the University of the Saarland (Germany) and held post-doc positions at the University of Edinburgh (UK) and the La Sapienza University in Rome (Italy). In 2010, he moved to his current position in Groningen, leading the computational semantics group. Bos is the developer of Boxer, a state-of-the-art wide-coverage semantic parser for English, initiator of the Groningen Meaning Bank, a large semantically-annotated corpus of texts, and inventor of Wordrobe, a game with a purpose for semantic annotation. Bos received a $1.5-million Vici grant from NWO (Netherlands Organisation for Scientific Research) in 2015 to investigate the role of meaning in human and machine translation. A concrete outcome of this project is the Parallel Meaning Bank containing detailed meaning representations for English, German, Dutch and Italian sentences.

Invited Speaker: Julia Hirschberg, Columbia University
Truth or Lie? Spoken Indicators of Deception in Speech

Abstract: Detecting deception from various forms of human behavior is a longstanding research goal which is of considerable interest to the military, law enforcement, corporate security, social services and mental health workers. However, both humans and polygraphs are very poor at this task. We describe more accurate methods we have developed to detect deception automatically from spoken language. Our classifiers are trained on the largest cleanly recorded corpus of within-subject deceptive and non-deceptive speech that has been collected. To distinguish truth from lie we make use of acoustic-prosodic, lexical, demographic, and personality features. We further examine differences in deceptive behavior based upon gender, personality, and native language (Mandarin Chinese vs. English), comparing our systems to human performance. We extend our studies to identify cues in trusted speech vs. mistrusted speech and how these features differ by speaker and by listener. Why does a listener believe a lie?

Bio: Julia Hirschberg is Percy K. and Vida L. W. Hudson Professor and Chair of Computer Science at Columbia University. She previously worked at Bell Laboratories and AT&T Labs where she created the HCI Research Department. She has been editor of Computational Linguistics and Speech Communication, is a fellow of AAAI, ISCA, ACL, ACM, and IEEE, and a member of the National Academy of Engineering. She received the IEEE James L. Flanagan Speech and Audio Processing Award and the ISCA Medal for Scientific Achievement. She currently serves on the IEEE Speech and Language Processing Technical Committee, is co-chair of the CRA-W Board, and has worked for diversity for many years at AT&T and Columbia. She works on spoken language processing and NLP, studying text-to-speech synthesis, spoken dialogue systems, entrainment in conversation, detection of deceptive and emotional speech, hedging behavior, and linguistic code-switching (language mixing).

Invited Speaker: Gideon Mann, Bloomberg L.P.
Understanding the News that Moves Markets

Abstract: Since the dawn of human civilization, finance and language technology have been connected. However, only recently have advances in statistical language understanding, and an ever-increasing thirst for market advantage, led to the widespread application of natural language technology across the global capital markets. This talk will review the ways in which language technology is enabling market participants to quickly understand and respond to major world events and breaking business news. It will outline the state of the art in applications of NLP to finance and highlight open problems that are being addressed by emerging research.

Bio: Gideon Mann is the Head of Data Science at Bloomberg L.P., where he guides the strategic direction for machine learning, natural language processing (NLP) and search across the company. He is part of the leadership team for the Office of the CTO. He served as a founding member of both the Data for Good Exchange (D4GX), an annual conference on data science applications for social good, and the Shift Commission on Work, Workers and Technology. He has also been active in academic research in fact extraction, weakly-supervised learning, and distributed optimization. Recently, he has also been interested in applications of machine learning to problems in software engineering. From 2007 to 2014, he worked at Google Research in New York City, and his team built core machine learning libraries, released the Google Prediction API, and developed Colaboratory. Mann graduated Brown University in 1999 and received a Ph.D. from The Johns Hopkins University in 2006.

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Conference Program

Friday, November 2, 2018

09:00–09:30 ***Opening remarks (Gold Hall)***

09:30–10:30 ***Keynote I: Julia Hirschberg "Truth or Lie? Spoken Indicators of Deception in Speech" (Gold Hall)***

10:30–11:00 ***Coffee Break***

11:00–12:30 ***Long Papers and Demos (Orals and Posters) I***

Session 1A: Social Applications I (Gold Hall)

11:00–11:18 *Privacy-preserving Neural Representations of Text*
Maximin Coavoux, Shashi Narayan and Shay B. Cohen

11:18–11:36 *Adversarial Removal of Demographic Attributes from Text Data*
Yanai Elazar and Yoav Goldberg

11:36–11:54 *DeClarE: Debunking Fake News and False Claims using Evidence-Aware Deep Learning*
Kashyap Popat, Subhabrata Mukherjee, Andrew Yates and Gerhard Weikum

11:54–12:12 *It's going to be okay: Measuring Access to Support in Online Communities*
Zijian Wang and David Jurgens

12:12–12:30 *Detecting Gang-Involved Escalation on Social Media Using Context*
Serina Chang, Ruiqi Zhong, Ethan Adams, Fei-Tzin Lee, Siddharth Varia, Desmond Patton, William Frey, Chris Kedzie and Kathy McKeown

Session 1B: Semantics I (Copper Hall)

11:00–11:18 *Reasoning about Actions and State Changes by Injecting Commonsense Knowledge*
Niket Tandon, Bhavana Dalvi, Joel Grus, Wen-tau Yih, Antoine Bosselut and Peter Clark

11:18–11:36 *Collecting Diverse Natural Language Inference Problems for Sentence Representation Evaluation*
Adam Poliak, Aparajita Haldar, Rachel Rudinger, J. Edward Hu, Ellie Pavlick, Aaron Steven White and Benjamin Van Durme

11:36–11:54 *Textual Analogy Parsing: What's Shared and What's Compared among Analogous Facts*
Matthew Lamm, Arun Chaganty, Christopher D. Manning, Dan Jurafsky and Percy Liang

11:54–12:12 *SWAG: A Large-Scale Adversarial Dataset for Grounded Commonsense Inference*
Rowan Zellers, Yonatan Bisk, Roy Schwartz and Yejin Choi

12:12–12:30 *TwoWingOS: A Two-Wing Optimization Strategy for Evidential Claim Verification*
Wenpeng Yin and Dan Roth

Session 1C: Vision (Silver Hall)

11:00–11:18 *Associative Multichannel Autoencoder for Multimodal Word Representation*
Shaonan Wang, Jiajun Zhang and Chengqing Zong

11:18–11:36 *Game-Based Video-Context Dialogue*
Ramakanth Pasunuru and Mohit Bansal

11:36–11:54 *simNet: Stepwise Image-Topic Merging Network for Generating Detailed and Comprehensive Image Captions*
Fenglin Liu, Xuancheng Ren, Yuanxin Liu, Houfeng Wang and Xu Sun

11:54–12:12 *Multimodal Language Analysis with Recurrent Multistage Fusion*
Paul Pu Liang, Ziyin Liu, AmirAli Bagher Zadeh and Louis-Philippe Morency

12:12–12:30 *Temporally Grounding Natural Sentence in Video*
Jingyuan Chen, Xinpeng Chen, Lin Ma, Zequn Jie and Tat-Seng Chua

Session 1D: Entities and Coreference (Hall 100)

11:00–11:18 *PreCo: A Large-scale Dataset in Preschool Vocabulary for Coreference Resolution*
Hong Chen, Zhenhua Fan, Hao Lu, Alan Yuille and Shu Rong

11:18–11:36 *Adversarial Transfer Learning for Chinese Named Entity Recognition with Self-Attention Mechanism*
Pengfei Cao, Yubo Chen, Kang Liu, Jun Zhao and Shengping Liu

11:36–11:54 *Using Linguistic Features to Improve the Generalization Capability of Neural Coreference Resolvers*
Nafise Sadat Moosavi and Michael Strube

11:54–12:12 *Neural Segmental Hypergraphs for Overlapping Mention Recognition*
Bailin Wang and Wei Lu

12:12–12:30 *Variational Sequential Labelers for Semi-Supervised Learning*
Mingda Chen, Qingming Tang, Karen Livescu and Kevin Gimpel

Session 1E: Machine Translation and Multilingual Methods (Posters and Demos, Grand Hall 2)

Joint Representation Learning of Cross-lingual Words and Entities via Attentive Distant Supervision
Yixin Cao, Lei Hou, Juanzi Li, Zhiyuan Liu, Chengjiang Li, Xu Chen and Tiansi Dong

Deep Pivot-Based Modeling for Cross-language Cross-domain Transfer with Minimal Guidance
Yftah Ziser and Roi Reichart

Multi-lingual Common Semantic Space Construction via Cluster-consistent Word Embedding
Lifu Huang, Kyunghyun Cho, Boliang Zhang, Heng Ji and Kevin Knight

Unsupervised Multilingual Word Embeddings
Xilun Chen and Claire Cardie

CLUSE: Cross-Lingual Unsupervised Sense Embeddings
Ta Chung Chi and Yun-Nung Chen

Adversarial Propagation and Zero-Shot Cross-Lingual Transfer of Word Vector Specialization
Edoardo Maria Ponti, Ivan Vulić, Goran Glavaš, Nikola Mrkšić and Anna Korhonen

Improving Cross-Lingual Word Embeddings by Meeting in the Middle
Yerai Doval, Jose Camacho-Collados, Luis Espinosa Anke and Steven Schockaert

WikiAtomicEdits: A Multilingual Corpus of Wikipedia Edits for Modeling Language and Discourse
Manaal Faruqui, Ellie Pavlick, Ian Tenney and Dipanjan Das

On the Relation between Linguistic Typology and (Limitations of) Multilingual Language Modeling
Daniela Gerz, Ivan Vulić, Edoardo Maria Ponti, Roi Reichart and Anna Korhonen

A Fast, Compact, Accurate Model for Language Identification of Codemixed Text
Yuan Zhang, Jason Riesa, Daniel Gillick, Anton Bakalov, Jason Baldridge and David Weiss

Personalized Microblog Sentiment Classification via Adversarial Cross-lingual Multi-task Learning
Weichao Wang, Shi Feng, Wei Gao, Daling Wang and Yifei Zhang

Cross-lingual Knowledge Graph Alignment via Graph Convolutional Networks
Zhichun Wang, Qingsong Lv, Xiaohan Lan and Yu Zhang

Cross-lingual Lexical Sememe Prediction
Fanchao Qi, Yankai Lin, Maosong Sun, Hao Zhu, Ruobing Xie and Zhiyuan Liu

Neural Cross-Lingual Named Entity Recognition with Minimal Resources
Jiateng Xie, Zhilin Yang, Graham Neubig, Noah A. Smith and Jaime Carbonell

A Stable and Effective Learning Strategy for Trainable Greedy Decoding
Yun Chen, Victor O.K. Li, Kyunghyun Cho and Samuel Bowman

Addressing Troublesome Words in Neural Machine Translation
Yang Zhao, Jiajun Zhang, Zhongjun He, Chengqing Zong and Hua Wu

Top-down Tree Structured Decoding with Syntactic Connections for Neural Machine Translation and Parsing
Jetic Gū, Hassan S. Shavarani and Anoop Sarkar

XL-NBT: A Cross-lingual Neural Belief Tracking Framework
Wenhu Chen, Jianshu Chen, Yu Su, Xin Wang, Dong Yu, Xifeng Yan and William Yang Wang

Contextual Parameter Generation for Universal Neural Machine Translation
Emmanouil Antonios Platanios, Mrinmaya Sachan, Graham Neubig and Tom Mitchell

Back-Translation Sampling by Targeting Difficult Words in Neural Machine Translation
Marzieh Fadaee and Christof Monz

Multi-Domain Neural Machine Translation with Word-Level Domain Context Discrimination
Jiali Zeng, Jinsong Su, Huating Wen, Yang Liu, Jun Xie, Yongjing Yin and Jianqiang Zhao

A Discriminative Latent-Variable Model for Bilingual Lexicon Induction
Sebastian Ruder, Ryan Cotterell, Yova Kementchedjhieva and Anders Søgaard

Non-Adversarial Unsupervised Word Translation
Yedid Hoshen and Lior Wolf

Semi-Autoregressive Neural Machine Translation
Chunqi Wang, Ji Zhang and Haiqing Chen

Understanding Back-Translation at Scale
Sergey Edunov, Myle Ott, Michael Auli and David Grangier

Bootstrapping Transliteration with Constrained Discovery for Low-Resource Languages
Shyam Upadhyay, Jordan Kodner and Dan Roth

NORMA: Neighborhood Sensitive Maps for Multilingual Word Embeddings
Ndapa Nakashole

Adaptive Multi-pass Decoder for Neural Machine Translation
Xinwei Geng, Xiaocheng Feng, Bing Qin and Ting Liu

Improving the Transformer Translation Model with Document-Level Context
Jiacheng Zhang, Huanbo Luan, Maosong Sun, Feifei Zhai, Jingfang Xu, Min Zhang and Yang Liu

MTNT: A Testbed for Machine Translation of Noisy Text
Paul Michel and Graham Neubig

Demo: CytonMT: an Efficient Neural Machine Translation Open-source Toolkit Implemented in C++
Xiaolin Wang, Masao Utiyama, and Eiichiro Sumita

Demo: SentencePiece: A simple and language independent subword tokenizer and detokenizer for Neural Text Processing
Taku Kudo and John Richardson

12:30–13:45 ***Lunch***

13:45–14:45 ***Short Papers (Orals and Posters) I***

Session 2A: Question Answering I (Gold Hall)

13:45–13:57 *SimpleQuestions Nearly Solved: A New Upperbound and Baseline Approach*
Michael Petrochuk and Luke Zettlemoyer

13:57–14:09 *Phrase-Indexed Question Answering: A New Challenge for Scalable Document Comprehension*
Minjoon Seo, Tom Kwiatkowski, Ankur Parikh, Ali Farhadi and Hannaneh Hajishirzi

14:09–14:21 *Ranking Paragraphs for Improving Answer Recall in Open-Domain Question Answering*
Jinhyuk Lee, Seongjun Yun, Hyunjae Kim, Miyoung Ko and Jaewoo Kang

14:21–14:33 *Cut to the Chase: A Context Zoom-in Network for Reading Comprehension*
Sathish Reddy Indurthi, Seunghak Yu, Seohyun Back and Heriberto Cuayahuitl

14:33–14:45 *Adaptive Document Retrieval for Deep Question Answering*
Bernhard Kratzwald and Stefan Feuerriegel

Session 2B: Semantics II (Copper Hall)

13:45–13:57 *Why is unsupervised alignment of English embeddings from different algorithms so hard?*
Mareike Hartmann, Yova Kementchedjhieva and Anders Søgaard

13:57–14:09 *Quantifying Context Overlap for Training Word Embeddings*
Yimeng Zhuang, Jinghui Xie, Yinhe Zheng and Xuan Zhu

14:09–14:21 *Neural Latent Relational Analysis to Capture Lexical Semantic Relations in a Vector Space*
Koki Washio and Tsuneaki Kato

14:21–14:33 *Generalizing Word Embeddings using Bag of Subwords*
Jinman Zhao, Sidharth Mudgal and Yingyu Liang

14:33–14:45 *Neural Metaphor Detection in Context*
Ge Gao, Eunsol Choi, Yejin Choi and Luke Zettlemoyer

Session 2C: Multilingual Methods I (Silver Hall)

13:45–13:57 *Distant Supervision from Disparate Sources for Low-Resource Part-of-Speech Tagging*
Barbara Plank and Željko Agić

13:57–14:09 *Unsupervised Bilingual Lexicon Induction via Latent Variable Models*
Zi-Yi Dou, Zhi-Hao Zhou and Shujian Huang

14:09–14:21 *Learning Unsupervised Word Translations Without Adversaries*
Tanmoy Mukherjee, Makoto Yamada and Timothy Hospedales

14:21–14:33 *Adversarial Training for Multi-task and Multi-lingual Joint Modeling of Utterance Intent Classification*
Ryo Masumura, Yusuke Shinohara, Ryuichiro Higashinaka and Yushi Aono

14:33–14:45 *Surprisingly Easy Hard-Attention for Sequence to Sequence Learning*
Shiv Shankar, Siddhant Garg and Sunita Sarawagi

Session 2D: Social Media (Hall 100)

13:45–13:57 *Joint Learning for Emotion Classification and Emotion Cause Detection*
Ying Chen, Wenjun Hou, Xiyao Cheng and Shoushan Li

13:57–14:09 *Exploring Optimism and Pessimism in Twitter Using Deep Learning*
Cornelia Caragea, Liviu P. Dinu and Bogdan Dumitru

14:09–14:21 *Predicting News Headline Popularity with Syntactic and Semantic Knowledge Using Multi-Task Learning*
Sotiris Lamprinidis, Daniel Hardt and Dirk Hovy

14:21–14:33 *Hybrid Neural Attention for Agreement/Disagreement Inference in Online Debates*
Di Chen, Jiachen Du, Lidong Bing and Ruifeng Xu

14:33–14:45 *Increasing In-Class Similarity by Retrofitting Embeddings with Demographic Information*
Dirk Hovy and Tommaso Fornaciari

Session 2E: Short Posters I (Grand Hall 2)

A Syntactically Constrained Bidirectional-Asynchronous Approach for Emotional Conversation Generation
Jingyuan Li and Xiao Sun

Auto-Dialabel: Labeling Dialogue Data with Unsupervised Learning
Chen Shi, Qi Chen, Lei Sha, Sujian Li, Xu Sun, Houfeng Wang and Lintao Zhang

Extending Neural Generative Conversational Model using External Knowledge Sources
Prasanna Parthasarathi and Joelle Pineau

Modeling Temporality of Human Intentions by Domain Adaptation
Xiaolei Huang, Lixing Liu, Kate Carey, Joshua Woolley, Stefan Scherer and Brian Borsari

An Auto-Encoder Matching Model for Learning Utterance-Level Semantic Dependency in Dialogue Generation
Liangchen Luo, Jingjing Xu, Junyang Lin, Qi Zeng and Xu Sun

A Dataset for Document Grounded Conversations
Kangyan Zhou, Shrimai Prabhumoye and Alan W Black

Out-of-domain Detection based on Generative Adversarial Network
Seonghan Ryu, Sangjun Koo, Hwanjo Yu and Gary Geunbae Lee

Listening Comprehension over Argumentative Content
Shachar Mirkin, Guy Moshkowich, Matan Orbach, Lili Kotlerman, Yoav Kantor, Tamar Lavee, Michal Jacovi, Yonatan Bilu, Ranit Aharonov and Noam Slonim

Using active learning to expand training data for implicit discourse relation recognition
Yang Xu, Yu Hong, Huibin Ruan, Jianmin Yao, Min Zhang and Guodong Zhou

Learning To Split and Rephrase From Wikipedia Edit History
Jan A. Botha, Manaal Faruqui, John Alex, Jason Baldridge and Dipanjan Das

BLEU is Not Suitable for the Evaluation of Text Simplification
Elior Sulem, Omri Abend and Ari Rappoport

S2SPMN: A Simple and Effective Framework for Response Generation with Relevant Information
Jiaxin Pei and Chenliang Li

Improving Reinforcement Learning Based Image Captioning with Natural Language Prior
Tszhang Guo, Shiyu Chang, Mo Yu and Kun Bai

Training for Diversity in Image Paragraph Captioning
Luke Melas-Kyriazi, Alexander Rush and George Han

A Graph-theoretic Summary Evaluation for ROUGE
Elaheh ShafieiBavani, Mohammad Ebrahimi, Raymond Wong and Fang Chen

Guided Neural Language Generation for Abstractive Summarization using Abstract Meaning Representation
Hardy Hardy and Andreas Vlachos

Evaluating Multiple System Summary Lengths: A Case Study
Ori Shapira, David Gabay, Hadar Ronen, Judit Bar-Ilan, Yael Amsterdamer, Ani Nenkova and Ido Dagan

Neural Latent Extractive Document Summarization
Xingxing Zhang, Mirella Lapata, Furu Wei and Ming Zhou

On the Abstractiveness of Neural Document Summarization
Fangfang Zhang, Jin-ge Yao and Rui Yan

Automatic Essay Scoring Incorporating Rating Schema via Reinforcement Learning
Yucheng Wang, Zhongyu Wei, Yaqian Zhou and Xuanjing Huang

Identifying Well-formed Natural Language Questions
Manaal Faruqui and Dipanjan Das

15:00–15:12 *Self-Governing Neural Networks for On-Device Short Text Classification*
Sujith Ravi and Zornitsa Kozareva

HFT-CNN: Learning Hierarchical Category Structure for Multi-label Short Text Categorization
Kazuya Shimura, Jiyi Li and Fumiyo Fukumoto

A Hierarchical Neural Attention-based Text Classifier
Koustuv Sinha, Yue Dong, Jackie Chi Kit Cheung and Derek Ruths

Labeled Anchors and a Scalable, Transparent, and Interactive Classifier
Jeffrey Lund, Stephen Cowley, Wilson Fearn, Emily Hales and Kevin Seppi

Coherence-Aware Neural Topic Modeling
Ran Ding, Ramesh Nallapati and Bing Xiang

Utilizing Character and Word Embeddings for Text Normalization with Sequence-to-Sequence Models
Daniel Watson, Nasser Zalmout and Nizar Habash

Topic Intrusion for Automatic Topic Model Evaluation
Shraey Bhatia, Jey Han Lau and Timothy Baldwin

Supervised and Unsupervised Methods for Robust Separation of Section Titles and Prose Text in Web Documents
Abhijith Athreya Mysore Gopinath, Shomir Wilson and Norman Sadeh

Friday, November 2, 2018 (continued)

14:45–15:00 ***Mini-Break***

15:00–16:00 ***Short Papers (Orals and Posters) II***

Session 3A: Machine Translation I (Gold Hall)

15:00–15:12 *SwitchOut: an Efficient Data Augmentation Algorithm for Neural Machine Translation*
Xinyi Wang, Hieu Pham, Zihang Dai and Graham Neubig

15:12–15:24 *Improving Unsupervised Word-by-Word Translation with Language Model and Denoising Autoencoder*
Yunsu Kim, Jiahui Geng and Hermann Ney

15:24–15:36 *Decipherment of Substitution Ciphers with Neural Language Models*
Nishant Kambhatla, Anahita Mansouri Bigvand and Anoop Sarkar

15:36–15:48 *Rapid Adaptation of Neural Machine Translation to New Languages*
Graham Neubig and Junjie Hu

15:48–16:00 *Compact Personalized Models for Neural Machine Translation*
Joern Wuebker, Patrick Simianer and John DeNero

Session 3B: Machine Learning I (Copper Hall)

15:00–15:12 *Self-Governing Neural Networks for On-Device Short Text Classification*
Sujith Ravi and Zornitsa Kozareva

15:12–15:24 *Supervised Domain Enablement Attention for Personalized Domain Classification*
Joo-Kyung Kim and Young-Bum Kim

15:24–15:36 *A Deep Neural Network Sentence Level Classification Method with Context Information*
Xingyi Song, Johann Petrak and Angus Roberts

15:36–15:48 *Towards Dynamic Computation Graphs via Sparse Latent Structure*
Vlad Niculae, André F. T. Martins and Claire Cardie

15:48–16:00 *Convolutional Neural Networks with Recurrent Neural Filters*
Yi Yang

Session 3C: Semantic Parsing / Generation (Silver Hall)

15:00–15:12 *Exploiting Rich Syntactic Information for Semantic Parsing with Graph-to-Sequence Model*
Kun Xu, Lingfei Wu, Zhiguo Wang, Mo Yu, Liwei Chen and Vadim Sheinin

15:12–15:24 *Retrieval-Based Neural Code Generation*
Shirley Anugrah Hayati, Raphael Olivier, Pravalika Avvaru, Pengcheng Yin, Anthony Tomasic and Graham Neubig

15:24–15:36 *SQL-to-Text Generation with Graph-to-Sequence Model*
Kun Xu, Lingfei Wu, Zhiguo Wang, Yansong Feng and Vadim Sheinin

15:36–15:48 *Generating Syntactic Paraphrases*
Emilie Colin and Claire Gardent

15:48–16:00 *Neural-Davidsonian Semantic Proto-role Labeling*
Rachel Rudinger, Adam Teichert, Ryan Culkin, Sheng Zhang and Benjamin Van Durme

Session 3D: Vision / Discourse (Hall 100)

15:00–15:12 *Conversational Decision-Making Model for Predicting the King's Decision in the Annals of the Joseon Dynasty*
JinYeong Bak and Alice Oh

15:12–15:24 *Toward Fast and Accurate Neural Discourse Segmentation*
Yizhong Wang, Sujian Li and Jingfeng Yang

15:24–15:36 *A Dataset for Telling the Stories of Social Media Videos*
Spandana Gella, Mike Lewis and Marcus Rohrbach

15:36–15:48 *Cascaded Mutual Modulation for Visual Reasoning*
Yiqun Yao, Jiaming Xu, Feng Wang and Bo Xu

15:48–16:00 *How agents see things: On visual representations in an emergent language game*
Diane Bouchacourt and Marco Baroni

Session 3E: Short Posters II (Grand Hall 2)

Attention-Based Capsule Networks with Dynamic Routing for Relation Extraction
Ningyu Zhang, Shumin Deng, Zhanling Sun, Xi Chen, Wei Zhang and Huajun Chen

Put It Back: Entity Typing with Language Model Enhancement
Ji Xin, Hao Zhu, Xu Han, Zhiyuan Liu and Maosong Sun

Event Detection with Neural Networks: A Rigorous Empirical Evaluation
Walker Orr, Prasad Tadepalli and Xiaoli Fern

PubSE: A Hierarchical Model for Publication Extraction from Academic Homepages
Yiqing Zhang, Jianzhong Qi, Rui Zhang and Chuandong Yin

A Neural Transition-based Model for Nested Mention Recognition
Bailin Wang, Wei Lu, Yu Wang and Hongxia Jin

Genre Separation Network with Adversarial Training for Cross-genre Relation Extraction
Ge Shi, Chong Feng, Lifu Huang, Boliang Zhang, Heng Ji, Lejian Liao and Heyan Huang

Effective Use of Context in Noisy Entity Linking
David Mueller and Greg Durrett

Exploiting Contextual Information via Dynamic Memory Network for Event Detection
Shaobo Liu, Rui Cheng, Xiaoming Yu and Xueqi Cheng

Do explanations make VQA models more predictable to a human?
Arjun Chandrasekaran, Viraj Prabhu, Deshraj Yadav, Prithvijit Chattopadhyay and Devi Parikh

Facts That Matter
Marco Ponza, Luciano Del Corro and Gerhard Weikum

Entity Tracking Improves Cloze-style Reading Comprehension
Luong Hoang, Sam Wiseman and Alexander Rush

Adversarial Domain Adaptation for Duplicate Question Detection
Darsh Shah, Tao Lei, Alessandro Moschitti, Salvatore Romeo and Preslav Nakov

Translating a Math Word Problem to a Expression Tree
Lei Wang, Yan Wang, Deng Cai, Dongxiang Zhang and Xiaojiang Liu

Semantic Linking in Convolutional Neural Networks for Answer Sentence Selection
Massimo Nicosia and Alessandro Moschitti

A dataset and baselines for sequential open-domain question answering
Ahmed Elgohary, Chen Zhao and Jordan Boyd-Graber

Improving the results of string kernels in sentiment analysis and Arabic dialect identification by adapting them to your test set
Radu Tudor Ionescu and Andrei M. Butnaru

Parameterized Convolutional Neural Networks for Aspect Level Sentiment Classification
Binxuan Huang and Kathleen Carley

Improving Multi-label Emotion Classification via Sentiment Classification with Dual Attention Transfer Network
Jianfei Yu, Luis Marujo, Jing Jiang, Pradeep Karuturi and William Brendel

Learning Sentiment Memories for Sentiment Modification without Parallel Data
Yi Zhang, Jingjing Xu, Pengcheng Yang and Xu Sun

Joint Aspect and Polarity Classification for Aspect-based Sentiment Analysis with End-to-End Neural Networks
Martin Schmitt, Simon Steinheber, Konrad Schreiber and Benjamin Roth

Representing Social Media Users for Sarcasm Detection
Y. Alex Kolchinski and Christopher Potts

Syntactical Analysis of the Weaknesses of Sentiment Analyzers
Rohil Verma, Samuel Kim and David Walter

Is Nike female? Exploring the role of sound symbolism in predicting brand name gender
Sridhar Moorthy, Ruth Pogacar, Samin Khan and Yang Xu

Improving Large-Scale Fact-Checking using Decomposable Attention Models and Lexical Tagging
Nayeon Lee, Chien-Sheng Wu and Pascale Fung

Harnessing Popularity in Social Media for Extractive Summarization of Online Conversations
Ryuji Kano, Yasuhide Miura, Motoki Taniguchi, Yan-Ying Chen, Francine Chen and Tomoko Ohkuma

Identifying Locus of Control in Social Media Language
Masoud Rouhizadeh, Kokil Jaidka, Laura Smith, H. Andrew Schwartz, Anneke Buffone and Lyle Ungar

Somm: Into the Model
Shengli Hu

Fine-Grained Emotion Detection in Health-Related Online Posts
Hamed Khanpour and Cornelia Caragea

The Remarkable Benefit of User-Level Aggregation for Lexical-based Population-Level Predictions
Salvatore Giorgi, Daniel Preoţiuc-Pietro, Anneke Buffone, Daniel Rieman, Lyle Ungar and H. Andrew Schwartz

Friday, November 2, 2018 (continued)

16:00–16:30 ***Coffee Break***

16:30–18:00 ***Long Papers and Demos (Orals and Posters) II***

Session 4A: Language Models (Gold Hall)

16:30–16:48 *Deterministic Non-Autoregressive Neural Sequence Modeling by Iterative Refinement*
Jason Lee, Elman Mansimov and Kyunghyun Cho

16:48–17:06 *Large Margin Neural Language Model*
Jiaji Huang, Yi Li, Wei Ping and Liang Huang

17:06–17:24 *Targeted Syntactic Evaluation of Language Models*
Rebecca Marvin and Tal Linzen

17:24–17:42 *Rational Recurrences*
Hao Peng, Roy Schwartz, Sam Thomson and Noah A. Smith

17:42–18:00 *Efficient Contextualized Representation: Language Model Pruning for Sequence Labeling*
Liyuan Liu, Xiang Ren, Jingbo Shang, Xiaotao Gu, Jian Peng and Jiawei Han

Session 4B: Information Extraction (Copper Hall)

16:30–16:48 *Automatic Event Salience Identification*
Zhengzhong Liu, Chenyan Xiong, Teruko Mitamura and Eduard Hovy

16:48–17:06 *Temporal Information Extraction by Predicting Relative Time-lines*
Artuur Leeuwenberg and Marie-Francine Moens

17:06–17:24 *Jointly Multiple Events Extraction via Attention-based Graph Information Aggregation*
Xiao Liu, Zhunchen Luo and Heyan Huang

17:24–17:42 *RESIDE: Improving Distantly-Supervised Neural Relation Extraction using Side Information*
Shikhar Vashishth, Rishabh Joshi, Sai Suman Prayaga, Chiranjib Bhattacharyya and Partha Talukdar

17:42–18:00 *Collective Event Detection via a Hierarchical and Bias Tagging Networks with Gated Multi-level Attention Mechanisms*
Yubo Chen, Hang Yang, Kang Liu, Jun Zhao and Yantao Jia

Session 4C: Syntactic Parsing (Silver Hall)

16:30–16:48 *Valency-Augmented Dependency Parsing*
Tianze Shi and Lillian Lee

16:48–17:06 *Unsupervised Learning of Syntactic Structure with Invertible Neural Projections*
Junxian He, Graham Neubig and Taylor Berg-Kirkpatrick

17:06–17:24 *Dynamic Oracles for Top-Down and In-Order Shift-Reduce Constituent Parsing*
Daniel Fernández-González and Carlos Gómez-Rodríguez

17:24–17:42 *Constituent Parsing as Sequence Labeling*
Carlos Gómez-Rodríguez and David Vilares

17:42–18:00 *Synthetic Data Made to Order: The Case of Parsing*
Dingquan Wang and Jason Eisner

Session 4D: Visual QA (Hall 100)

16:30–16:48 *Tell-and-Answer: Towards Explainable Visual Question Answering using Attributes and Captions*
Qing Li, Jianlong Fu, Dongfei Yu, Tao Mei and Jiebo Luo

16:48–17:06 *Learning a Policy for Opportunistic Active Learning*
Aishwarya Padmakumar, Peter Stone and Raymond Mooney

17:06–17:24 *RecipeQA: A Challenge Dataset for Multimodal Comprehension of Cooking Recipes*
Semih Yagcioglu, Aykut Erdem, Erkut Erdem and Nazli Ikizler-Cinbis

17:24–17:42 *TVQA: Localized, Compositional Video Question Answering*
Jie Lei, Licheng Yu, Mohit Bansal and Tamara Berg

17:42–18:00 *Localizing Moments in Video with Temporal Language*
Lisa Anne Hendricks, Oliver Wang, Eli Shechtman, Josef Sivic, Trevor Darrell and Bryan Russell

Session 4E: Semantics III (Posters and Demos, Grand Hall 2)

Card-660: Cambridge Rare Word Dataset - a Reliable Benchmark for Infrequent Word Representation Models
Mohammad Taher Pilehvar, Dimitri Kartsaklis, Victor Prokhorov and Nigel Collier

Leveraging Gloss Knowledge in Neural Word Sense Disambiguation by Hierarchical Co-Attention
Fuli Luo, Tianyu Liu, Zexue He, Qiaolin Xia, Zhifang Sui and Baobao Chang

Weeding out Conventionalized Metaphors: A Corpus of Novel Metaphor Annotations
Erik-Lân Do Dinh, Hannah Wieland and Iryna Gurevych

Streaming word similarity mining on the cheap
Olof Görnerup and Daniel Gillblad

Memory, Show the Way: Memory Based Few Shot Word Representation Learning
Jingyuan Sun, Shaonan Wang and Chengqing Zong

Disambiguated skip-gram model
Karol Grzegorczyk and Marcin Kurdziel

Picking Apart Story Salads
Su Wang, Eric Holgate, Greg Durrett and Katrin Erk

Dynamic Meta-Embeddings for Improved Sentence Representations
Douwe Kiela, Changhan Wang and Kyunghyun Cho

A Probabilistic Model for Joint Learning of Word Embeddings from Texts and Images
Melissa Ailem, Bowen Zhang, Aurélien Bellet, Pascal Denis and Fei Sha

Transfer and Multi-Task Learning for Noun–Noun Compound Interpretation
Murhaf Fares, Stephan Oepen and Erik Velldal

Dissecting Contextual Word Embeddings: Architecture and Representation
Matthew Peters, Mark Neumann, Luke Zettlemoyer and Wen-tau Yih

Preposition Sense Disambiguation and Representation
Hongyu Gong, Jiaqi Mu, Suma Bhat and Pramod Viswanath

Auto-Encoding Dictionary Definitions into Consistent Word Embeddings
Tom Bosc and Pascal Vincent

Spot the Odd Man Out: Exploring the Associative Power of Lexical Resources
Gabriel Stanovsky and Mark Hopkins

(TACL) Linear Algebraic Structure of Word Senses, with Applications to Polysemy
Sanjeev Arora, Yuanzhi Li, Yingyu Liang, Tengyu Ma, and Andrej Risteski

Neural Multitask Learning for Simile Recognition
Lizhen Liu, Xiao Hu, Wei Song, Ruiji Fu, Ting Liu and Guoping Hu

Structured Alignment Networks for Matching Sentences
Yang Liu, Matt Gardner and Mirella Lapata

Compare, Compress and Propagate: Enhancing Neural Architectures with Alignment Factorization for Natural Language Inference
Yi Tay, Anh Tuan Luu and Siu Cheung Hui

Convolutional Interaction Network for Natural Language Inference
Jingjing Gong, Xipeng Qiu, Xinchi Chen, Dong Liang and Xuanjing Huang

Lessons from Natural Language Inference in the Clinical Domain
Alexey Romanov and Chaitanya Shivade

Question Generation from SQL Queries Improves Neural Semantic Parsing
Daya Guo, Yibo Sun, Duyu Tang, Nan Duan, Jian Yin, Hong Chi, James Cao, Peng Chen and Ming Zhou

SemRegex: A Semantics-Based Approach for Generating Regular Expressions from Natural Language Specifications
Zexuan Zhong, Jiaqi Guo, Wei Yang, Jian Peng, Tao Xie, Jian-Guang Lou, Ting Liu and Dongmei Zhang

Decoupling Structure and Lexicon for Zero-Shot Semantic Parsing
Jonathan Herzig and Jonathan Berant

A Span Selection Model for Semantic Role Labeling
Hiroki Ouchi, Hiroyuki Shindo and Yuji Matsumoto

Mapping Language to Code in Programmatic Context
Srinivasan Iyer, Ioannis Konstas, Alvin Cheung and Luke Zettlemoyer

SyntaxSQLNet: Syntax Tree Networks for Complex and Cross-Domain Text-to-SQL Task
Tao Yu, Michihiro Yasunaga, Kai Yang, Rui Zhang, Dongxu Wang, Zifan Li and Dragomir Radev

Cross-lingual Decompositional Semantic Parsing
Sheng Zhang, Xutai Ma, Rachel Rudinger, Kevin Duh and Benjamin Van Durme

Learning to Learn Semantic Parsers from Natural Language Supervision
Igor Labutov, Bishan Yang and Tom Mitchell

DeepCx: A transition-based approach for shallow semantic parsing with complex constructional triggers
Jesse Dunietz, Jaime Carbonell and Lori Levin

What It Takes to Achieve 100% Condition Accuracy on WikiSQL
Semih Yavuz, Izzeddin Gur, Yu Su and Xifeng Yan

Better Transition-Based AMR Parsing with a Refined Search Space
Zhijiang Guo and Wei Lu

Demo: TRANX: A Transition-based Neural Abstract Syntax Parser for Semantic Parsing and Code Generation
Xiaolin Wang, Masao Utiyama, and Eiichiro Sumita

Demo: Visual Interrogation of Attention-Based Models for Natural Language Inference and Machine Comprehension
Shusen Liu, Tao Li, Zhimin Liu, Vivek Srikumar, Valerio Pascucci, and Peer-Timo Bremer

Demo: Magnitude: A Fast, Efficient Universal Vector Embedding Utility Package
Ajay Patel, Alexander Sands, Chris Callison-Burch, and Marianna Apidianaki

Demo: Universal Sentence Encoder for English
Daniel Cer, Yinfei Yang, Sheng-yi Kong, Nan Hua, Nicole Limtiaco, Rhomni St. John, Noah Constant, Mario Guajardo-Cespedes, Steve Yuan, Chris Tar, Brian Strope, and Ray Kurzweil

Saturday, November 3, 2018

09:00–10:30 ***Long Papers and Demos (Orals and Posters) III***

Session 5A: Semantics IV (Gold Hall)

09:00–09:18 *Heuristically Informed Unsupervised Idiom Usage Recognition*
Changsheng Liu and Rebecca Hwa

09:18–09:36 *Coming to Your Senses: on Controls and Evaluation Sets in Polysemy Research*
Haim Dubossarsky, Eitan Grossman and Daphna Weinshall

09:36–09:54 *Predicting Semantic Relations using Global Graph Properties*
Yuval Pinter and Jacob Eisenstein

09:54–10:12 *Learning Scalar Adjective Intensity from Paraphrases*
Anne Cocos, Veronica Wharton, Ellie Pavlick, Marianna Apidianaki and Chris Callison-Burch

10:12–10:30 *Pointwise HSIC: A Linear-Time Kernelized Co-occurrence Norm for Sparse Linguistic Expressions*
Sho Yokoi, Sosuke Kobayashi, Kenji Fukumizu, Jun Suzuki and Kentaro Inui

Session 5B: Summarization (Copper Hall)

09:00–09:18 *Neural Related Work Summarization with a Joint Context-driven Attention Mechanism*
Yongzhen Wang, Xiaozhong Liu and Zheng Gao

09:18–09:36 *Improving Neural Abstractive Document Summarization with Explicit Information Selection Modeling*
Wei Li, Xinyan Xiao, Yajuan Lyu and Yuanzhuo Wang

09:36–09:54 *Don't Give Me the Details, Just the Summary! Topic-Aware Convolutional Neural Networks for Extreme Summarization*
Shashi Narayan, Shay B. Cohen and Mirella Lapata

09:54–10:12 *Improving Abstraction in Text Summarization*
Wojciech Kryściński, Romain Paulus, Caiming Xiong and Richard Socher

Saturday, November 3, 2018 (continued)

10:12–10:30 *Content Selection in Deep Learning Models of Summarization*
Chris Kedzie, Kathleen McKeown and Hal Daume III

Session 5C: IR / Text Mining (Silver Hall)

09:00–09:18 *Improved Semantic-Aware Network Embedding with Fine-Grained Word Alignment*
Dinghan Shen, Xinyuan Zhang, Ricardo Henao and Lawrence Carin

09:18–09:36 *Learning Context-Sensitive Convolutional Filters for Text Processing*
Dinghan Shen, Martin Renqiang Min, Yitong Li and Lawrence Carin

09:36–09:54 *Deep Relevance Ranking Using Enhanced Document-Query Interactions*
Ryan McDonald, George Brokos and Ion Androutsopoulos

09:54–10:12 *Learning Neural Representation for CLIR with Adversarial Framework*
Bo Li and Ping Cheng

10:12–10:30 *AD3: Attentive Deep Document Dater*
Swayambhu Nath Ray, Shib Sankar Dasgupta and Partha Talukdar

Session 5D: Machine Learning II (Hall 100)

09:00–09:18 *Gromov-Wasserstein Alignment of Word Embedding Spaces*
David Alvarez-Melis and Tommi Jaakkola

09:18–09:36 *Deep Probabilistic Logic: A Unifying Framework for Indirect Supervision*
Hai Wang and Hoifung Poon

09:36–09:54 *Deriving Machine Attention from Human Rationales*
Yujia Bao, Shiyu Chang, Mo Yu and Regina Barzilay

09:54–10:12 *Semi-Supervised Sequence Modeling with Cross-View Training*
Kevin Clark, Minh-Thang Luong, Christopher D. Manning and Quoc Le

10:12–10:30 (TACL) Comparing Bayesian Models of Annotation
Silviu Paun, Bob Carpenter, Jon Chamberlain, Dirk Hovy, Udo Kruschwitz, and Massimo Poesio

Session 5E: Information Extraction, Question Answering (Posters and Demos, Grand Hall 2)

A Probabilistic Annotation Model for Crowdsourcing Coreference
Silviu Paun, Jon Chamberlain, Udo Kruschwitz, Juntao Yu and Massimo Poesio

A Deterministic Algorithm for Bridging Anaphora Resolution
Yufang Hou

A Knowledge Hunting Framework for Common Sense Reasoning
Ali Emami, Noelia De La Cruz, Adam Trischler, Kaheer Suleman and Jackie Chi Kit Cheung

Mapping Text to Knowledge Graph Entities using Multi-Sense LSTMs
Dimitri Kartsaklis, Mohammad Taher Pilehvar and Nigel Collier

Differentiating Concepts and Instances for Knowledge Graph Embedding
Xin Lv, Lei Hou, Juanzi Li and Zhiyuan Liu

One-Shot Relational Learning for Knowledge Graphs
Wenhan Xiong, Mo Yu, Shiyu Chang, Xiaoxiao Guo and William Yang Wang

Regular Expression Guided Entity Mention Mining from Noisy Web Data
Shanshan Zhang, Lihong He, Slobodan Vucetic and Eduard Dragut

HyTE: Hyperplane-based Temporally aware Knowledge Graph Embedding
Shib Sankar Dasgupta, Swayambhu Nath Ray and Partha Talukdar

Neural Adaptation Layers for Cross-domain Named Entity Recognition
Bill Yuchen Lin and Wei Lu

Entity Linking within a Social Media Platform: A Case Study on Yelp
Hongliang Dai, Yangqiu Song, Liwei Qiu and Rijia Liu

Annotation of a Large Clinical Entity Corpus
Pinal Patel, Disha Davey, Vishal Panchal and Parth Pathak

Visual Supervision in Bootstrapped Information Extraction
Matthew Berger, Ajay Nagesh, Joshua Levine, Mihai Surdeanu and Helen Zhang

Learning Named Entity Tagger using Domain-Specific Dictionary
Jingbo Shang, Liyuan Liu, Xiaotao Gu, Xiang Ren, Teng Ren and Jiawei Han

Zero-Shot Open Entity Typing as Type-Compatible Grounding
Ben Zhou, Daniel Khashabi, Chen-Tse Tsai and Dan Roth

Attention-Guided Answer Distillation for Machine Reading Comprehension
Minghao Hu, Yuxing Peng, Furu Wei, Zhen Huang, Dongsheng Li, Nan Yang and Ming Zhou

Interpretation of Natural Language Rules in Conversational Machine Reading
Marzieh Saeidi, Max Bartolo, Patrick Lewis, Sameer Singh, Tim Rocktäschel, Mike Sheldon, Guillaume Bouchard and Sebastian Riedel

A State-transition Framework to Answer Complex Questions over Knowledge Base
Sen Hu, Lei Zou and Xinbo Zhang

A Multi-answer Multi-task Framework for Real-world Machine Reading Comprehension
Jiahua Liu, Wan Wei, Maosong Sun, Hao Chen, Yantao Du and Dekang Lin

Logician and Orator: Learning from the Duality between Language and Knowledge in Open Domain
Mingming Sun, Xu Li and Ping Li

MemoReader: Large-Scale Reading Comprehension through Neural Memory Controller
Seohyun Back, Seunghak Yu, Sathish Reddy Indurthi, Jihie Kim and Jaegul Choo

Multi-Granular Sequence Encoding via Dilated Compositional Units for Reading Comprehension
Yi Tay, Anh Tuan Luu and Siu Cheung Hui

Neural Compositional Denotational Semantics for Question Answering
Nitish Gupta and Mike Lewis

Cross-Pair Text Representations for Answer Sentence Selection
Kateryna Tymoshenko and Alessandro Moschitti

QuAC: Question Answering in Context
Eunsol Choi, He He, Mohit Iyyer, Mark Yatskar, Wen-tau Yih, Yejin Choi, Percy Liang and Luke Zettlemoyer

Knowledge Base Question Answering via Encoding of Complex Query Graphs
Kangqi Luo, Fengli Lin, Xusheng Luo and Kenny Zhu

Neural Relation Extraction via Inner-Sentence Noise Reduction and Transfer Learning
Tianyi Liu, Xinsong Zhang, Wanhao Zhou and Weijia Jia

Graph Convolution over Pruned Dependency Trees Improves Relation Extraction
Yuhao Zhang, Peng Qi and Christopher D. Manning

Multi-Level Structured Self-Attentions for Distantly Supervised Relation Extraction
Jinhua Du, Jingguang Han, Andy Way and Dadong Wan

N-ary Relation Extraction using Graph-State LSTM
Linfeng Song, Yue Zhang, Zhiguo Wang and Daniel Gildea

Hierarchical Relation Extraction with Coarse-to-Fine Grained Attention
Xu Han, Pengfei Yu, Zhiyuan Liu, Maosong Sun and Peng Li

Label-Free Distant Supervision for Relation Extraction via Knowledge Graph Embedding
Guanying Wang, Wen Zhang, Ruoxu Wang, Yalin Zhou, Xi Chen, Wei Zhang, Hai Zhu and Huajun Chen

Extracting Entities and Relations with Joint Minimum Risk Training
Changzhi Sun, Yuanbin Wu, Man Lan, Shiliang Sun, Wenting Wang, Kuang-Chih Lee and Kewen Wu

Large-scale Exploration of Neural Relation Classification Architectures
Hoang-Quynh Le, Duy-Cat Can, Sinh T. Vu, Thanh Hai Dang, Mohammad Taher Pilehvar and Nigel Collier

Possessors Change Over Time: A Case Study with Artworks
Dhivya Chinnappa and Eduardo Blanco

Demo: CogCompTime: A Tool for Understanding Time in Natural Language
Qiang Ning, Ben Zhou, Zhili Feng, Haoruo Peng, and Dan Roth

Demo: DERE: A Task and Domain-Independent Slot Filling Framework for Declarative Relation Extraction
Heike Adel, Laura Ana Maria Bostan, Sean Papay, Sebastian Padó, and Roman Klinger

Demo: Integrating Knowledge-Supported Search into the INCEpTION Annotation Platform
Beto Boullosa, Richard Eckart de Castilho, Naveen Kumar, Jan-Christoph Klie, and Iryna Gurevych

Demo: OpenKE: An Open Toolkit for Knowledge Embedding
Xu Han, Shulin Cao, Xin Lv, Yankai Lin, Zhiyuan Liu, Maosong Sun, and Juanzi Li

Demo: An Interactive Web-Interface for Visualizing the Inner Workings of the Question Answering LSTM
Ekaterina Loginova and Günter Neumann

Demo: An Interface for Annotating Science Questions
Michael Boratko, Harshit Padigela, Divyendra Mikkilineni, Pritish Yuvraj, Rajarshi Das, Andrew McCallum, Maria Chang, Achille Fokoue, Pavan Kapanipathi, Nicholas Mattei, Ryan Musa, Kartik Talamadupula, and Michael Witbrock

Demo: Interactive Instance-based Evaluation of Knowledge Base Question Answering
Daniil Sorokin and Iryna Gurevych

10:30–11:00 ***Coffee Break***

11:00–12:30 ***Long Papers and Demos (Orals and Posters) IV***

Session 6A: Dialogue I (Gold Hall)

11:00–11:18 *Using Lexical Alignment and Referring Ability to Address Data Sparsity in Situated Dialog Reference Resolution*
Todd Shore and Gabriel Skantze

11:18–11:36 *Subgoal Discovery for Hierarchical Dialogue Policy Learning*
Da Tang, Xiujun Li, Jianfeng Gao, Chong Wang, Lihong Li and Tony Jebara

11:36–11:54 *Supervised Clustering of Questions into Intents for Dialog System Applications*
Iryna Haponchyk, Antonio Uva, Seunghak Yu, Olga Uryupina and Alessandro Moschitti

11:54–12:12 *Towards Exploiting Background Knowledge for Building Conversation Systems*
Nikita Moghe, Siddhartha Arora, Suman Banerjee and Mitesh M. Khapra

12:12–12:30 *Decoupling Strategy and Generation in Negotiation Dialogues*
He He, Derek Chen, Anusha Balakrishnan and Percy Liang

Session 6B: Question Answering II (Copper Hall)

11:00–11:18 *Large-scale Cloze Test Dataset Created by Teachers*
Qizhe Xie, Guokun Lai, Zihang Dai and Eduard Hovy

11:18–11:36 *emrQA: A Large Corpus for Question Answering on Electronic Medical Records*
Anusri Pampari, Preethi Raghavan, Jennifer Liang and Jian Peng

11:36–11:54 *HotpotQA: A Dataset for Diverse, Explainable Multi-hop Question Answering*
Zhilin Yang, Peng Qi, Saizheng Zhang, Yoshua Bengio, William Cohen, Ruslan Salakhutdinov and Christopher D. Manning

11:54–12:12 *Can a Suit of Armor Conduct Electricity? A New Dataset for Open Book Question Answering*
Todor Mihaylov, Peter Clark, Tushar Khot and Ashish Sabharwal

12:12–12:30 *Evaluating Theory of Mind in Question Answering*
Aida Nematzadeh, Kaylee Burns, Erin Grant, Alison Gopnik and Tom Griffiths

Session 6C: Semantics V (Silver Hall)

11:00–11:18 *A Unified Syntax-aware Framework for Semantic Role Labeling*
Zuchao Li, Shexia He, Jiaxun Cai, Zhuosheng Zhang, Hai Zhao, Gongshen Liu, Linlin Li and Luo Si

11:18–11:36 *Semantics as a Foreign Language*
Gabriel Stanovsky and Ido Dagan

11:36–11:54 *An AMR Aligner Tuned by Transition-based Parser*
Yijia Liu, Wanxiang Che, Bo Zheng, Bing Qin and Ting Liu

11:54–12:12 *Dependency-based Hybrid Trees for Semantic Parsing*
Zhanming Jie and Wei Lu

12:12–12:30 *Policy Shaping and Generalized Update Equations for Semantic Parsing from Denotations*
Dipendra Misra, Ming-Wei Chang, Xiaodong He and Wen-tau Yih

Session 6D: Multilingual Methods II (Hall 100)

11:00–11:18 *Sentence Compression for Arbitrary Languages via Multilingual Pivoting*
Jonathan Mallinson, Rico Sennrich and Mirella Lapata

11:18–11:36 *Unsupervised Cross-lingual Transfer of Word Embedding Spaces*
Ruochen Xu, Yiming Yang, Naoki Otani and Yuexin Wu

11:36–11:54 *XNLI: Evaluating Cross-lingual Sentence Representations*
Alexis Conneau, Ruty Rinott, Guillaume Lample, Adina Williams, Samuel Bowman, Holger Schwenk and Veselin Stoyanov

11:54–12:12 *Joint Multilingual Supervision for Cross-lingual Entity Linking*
Shyam Upadhyay, Nitish Gupta and Dan Roth

12:12–12:30 *Fine-grained Coordinated Cross-lingual Text Stream Alignment for Endless Language Knowledge Acquisition*
Tao Ge, Qing Dou, Heng Ji, Lei Cui, Baobao Chang, Zhifang Sui, Furu Wei and Ming Zhou

Session 6E: Syntax, Morphology, Vision and Language I (Posters and Demos, Grand Hall 2)

WECA:A WordNet-Encoded Collocation-Attention Network for Homographic Pun Recognition
Yufeng Diao, Hongfei Lin, Di Wu, Liang Yang, Kan Xu, Zhihao Yang, Jian Wang, Shaowu Zhang, Bo Xu and Dongyu Zhang

A Hybrid Approach to Automatic Corpus Generation for Chinese Spelling Check
Dingmin Wang, Yan Song, Jing Li, Jialong Han and Haisong Zhang

Neural Quality Estimation of Grammatical Error Correction
Shamil Chollampatt and Hwee Tou Ng

Transferring from Formal Newswire Domain with Hypernet for Twitter POS Tagging
Tao Gui, Qi Zhang, Jingjing Gong, Minlong Peng, di liang, Keyu Ding and Xuanjing Huang

Free as in Free Word Order: An Energy Based Model for Word Segmentation and Morphological Tagging in Sanskrit
Amrith Krishna, Bishal Santra, Sasi Prasanth Bandaru, Gaurav Sahu, Vishnu Dutt Sharma, Pavankumar Satuluri and Pawan Goyal

A Challenge Set and Methods for Noun-Verb Ambiguity
Ali Elkahky, Kellie Webster, Daniel Andor and Emily Pitler

What do character-level models learn about morphology? The case of dependency parsing
Clara Vania, Andreas Grivas and Adam Lopez

Learning Better Internal Structure of Words for Sequence Labeling
Yingwei Xin, Ethan Hart, Vibhuti Mahajan and Jean David Ruvini

ICON: Interactive Conversational Memory Network for Multimodal Emotion Detection
Devamanyu Hazarika, Soujanya Poria, Rada Mihalcea, Erik Cambria and Roger Zimmermann

Discriminative Learning of Open-Vocabulary Object Retrieval and Localization by Negative Phrase Augmentation
Ryota Hinami and Shin'ichi Satoh

Grounding Semantic Roles in Images
Carina Silberer and Manfred Pinkal

Commonsense Justification for Action Explanation
Shaohua Yang, Qiaozi Gao, Sari Sadiya and Joyce Chai

Learning Personas from Dialogue with Attentive Memory Networks
Eric Chu, Prashanth Vijayaraghavan and Deb Roy

Grounding language acquisition by training semantic parsers using captioned videos
Candace Ross, Andrei Barbu, Yevgeni Berzak, Battushig Myanganbayar and Boris Katz

Translating Navigation Instructions in Natural Language to a High-Level Plan for Behavioral Robot Navigation
Xiaoxue Zang, Ashwini Pokle, Marynel Vázquez, Kevin Chen, Juan Carlos Niebles, Alvaro Soto and Silvio Savarese

Mapping Instructions to Actions in 3D Environments with Visual Goal Prediction
Dipendra Misra, Andrew Bennett, Valts Blukis, Eyvind Niklasson, Max Shatkhin and Yoav Artzi

Deconvolutional Time Series Regression: A Technique for Modeling Temporally Diffuse Effects
Cory Shain and William Schuler

Is this Sentence Difficult? Do you Agree?
Dominique Brunato, Lorenzo De Mattei, Felice Dell'Orletta, Benedetta Iavarone and Giulia Venturi

Neural Transition Based Parsing of Web Queries: An Entity Based Approach
Rivka Malca and Roi Reichart

An Investigation of the Interactions Between Pre-Trained Word Embeddings, Character Models and POS Tags in Dependency Parsing
Aaron Smith, Miryam de Lhoneux, Sara Stymne and Joakim Nivre

Depth-bounding is effective: Improvements and evaluation of unsupervised PCFG induction
Lifeng Jin, Finale Doshi-Velez, Timothy Miller, William Schuler and Lane Schwartz

(TACL) In-Order Transition-based Constituent Parsing
Jiangming Liu and Yue Zhang

(TACL) Surface Statistics of an Unknown Language Indicate How to Parse It
Dingquan Wang and Jason Eisner

Incremental Computation of Infix Probabilities for Probabilistic Finite Automata
Marco Cognetta, Yo-Sub Han and Soon Chan Kwon

Syntax Encoding with Application in Authorship Attribution
Richong Zhang, Zhiyuan Hu, Hongyu Guo and Yongyi Mao

Sanskrit Word Segmentation Using Character-level Recurrent and Convolutional Neural Networks
Oliver Hellwig and Sebastian Nehrdich

(TACL) Universal Word Segmentation: Implementation and Interpretation
Yan Shao, Christian Hardmeier, and Joakim Nivre

Demo: MorAz: an Open-source Morphological Analyzer for Azerbaijani Turkish
Berke Özenç, Razieh Ehsani, and Ercan Solak

Demo: Juman++: A Morphological Analysis Toolkit for Scriptio Continua
Arseny Tolmachev, Daisuke Kawahara, and Sadao Kurohashi

12:30–13:45 ***Lunch***

13:45–14:45 ***Short Papers (Orals and Posters) III***

Session 7A: Dialogue II (Gold Hall)

13:45–13:57 *Session-level Language Modeling for Conversational Speech*
Wayne Xiong, Lingfeng Wu, Jun Zhang and Andreas Stolcke

13:57–14:09 *Towards Less Generic Responses in Neural Conversation Models: A Statistical Re-weighting Method*
Yahui Liu, Wei Bi, Jun Gao, Xiaojiang Liu, Jian Yao and Shuming Shi

14:09–14:21 *Training Millions of Personalized Dialogue Agents*
Pierre-Emmanuel Mazare, Samuel Humeau, Martin Raison and Antoine Bordes

14:21–14:33 *Towards Universal Dialogue State Tracking*
Liliang Ren, Kaige Xie, Lu Chen and Kai Yu

14:33–14:45 *Semantic Parsing for Task Oriented Dialog using Hierarchical Representations*
Sonal Gupta, Rushin Shah, Mrinal Mohit, Anuj Kumar and Mike Lewis

Session 7B: Social Applications II (Copper Hall)

13:45–13:57 *The glass ceiling in NLP*
Natalie Schluter

13:57–14:09 *Reducing Gender Bias in Abusive Language Detection*
Ji Ho Park, Jamin Shin and Pascale Fung

14:09–14:21 *SafeCity: Understanding Diverse Forms of Sexual Harassment Personal Stories*
Sweta Karlekar and Mohit Bansal

14:21–14:33 *Learning multiview embeddings for assessing dementia*
Chloé Pou-Prom and Frank Rudzicz

14:33–14:45 *WikiConv: A Corpus of the Complete Conversational History of a Large Online Collaborative Community*
Yiqing Hua, Cristian Danescu-Niculescu-Mizil, Dario Taraborelli, Nithum Thain, Jeffery Sorensen and Lucas Dixon

Session 7C: NER (Silver Hall)

13:45–13:57 *Marginal Likelihood Training of BiLSTM-CRF for Biomedical Named Entity Recognition from Disjoint Label Sets*
Nathan Greenberg, Trapit Bansal, Patrick Verga and Andrew McCallum

13:57–14:09 *Adversarial training for multi-context joint entity and relation extraction*
Giannis Bekoulis, Johannes Deleu, Thomas Demeester and Chris Develder

14:09–14:21 *Structured Multi-Label Biomedical Text Tagging via Attentive Neural Tree Decoding*
Gaurav Singh, James Thomas, Iain Marshall, John Shawe-Taylor and Byron C. Wallace

14:21–14:33 *Deep Exhaustive Model for Nested Named Entity Recognition*
Mohammad Golam Sohrab and Makoto Miwa

14:33–14:45 *Evaluating the Utility of Hand-crafted Features in Sequence Labelling*
Minghao Wu, Fei Liu and Trevor Cohn

Session 7D: Morphology / Parsing (Hall 100)

13:45–13:57 *Improved Dependency Parsing using Implicit Word Connections Learned from Unlabeled Data*
Wenhui Wang, Baobao Chang and Mairgup Mansur

13:57–14:09 *A Framework for Understanding the Role of Morphology in Universal Dependency Parsing*
Mathieu Dehouck and Pascal Denis

14:09–14:21 *The Lazy Encoder: A Fine-Grained Analysis of the Role of Morphology in Neural Machine Translation*
Arianna Bisazza and Clara Tump

14:21–14:33 *Imitation Learning for Neural Morphological String Transduction*
Peter Makarov and Simon Clematide

14:33–14:45 *An Encoder-Decoder Approach to the Paradigm Cell Filling Problem*
Miikka Silfverberg and Mans Hulden

Session 7E: Short Posters III (Grand Hall 2)

Generating Natural Language Adversarial Examples
Moustafa Alzantot, Yash Sharma, Ahmed Elgohary, Bo-Jhang Ho, Mani Srivastava and Kai-Wei Chang

Multi-Head Attention with Disagreement Regularization
Jian Li, Zhaopeng Tu, Baosong Yang, Michael R. Lyu and Tong Zhang

Deep Bayesian Active Learning for Natural Language Processing: Results of a Large-Scale Empirical Study
Aditya Siddhant and Zachary C. Lipton

Bayesian Compression for Natural Language Processing
Nadezhda Chirkova, Ekaterina Lobacheva and Dmitry Vetrov

Multimodal neural pronunciation modeling for spoken languages with logographic origin
Minh Nguyen, Gia H Ngo and Nancy Chen

Chinese Pinyin Aided IME, Input What You Have Not Keystroked Yet
Yafang Huang and Hai Zhao

Estimating Marginal Probabilities of n-grams for Recurrent Neural Language Models
Thanapon Noraset, Doug Downey and Lidong Bing

How to represent a word and predict it, too: Improving tied architectures for language modelling
Kristina Gulordava, Laura Aina and Gemma Boleda

The Importance of Generation Order in Language Modeling
Nicolas Ford, Daniel Duckworth, Mohammad Norouzi and George Dahl

Document-Level Neural Machine Translation with Hierarchical Attention Networks
Lesly Miculicich, Dhananjay Ram, Nikolaos Pappas and James Henderson

Three Strategies to Improve One-to-Many Multilingual Translation
Yining Wang, Jiajun Zhang, Feifei Zhai, Jingfang Xu and Chengqing Zong

Multi-Source Syntactic Neural Machine Translation
Anna Currey and Kenneth Heafield

Fixing Translation Divergences in Parallel Corpora for Neural MT
Minh Quang Pham, Josep Crego, Jean Senellart and François Yvon

Adversarial Evaluation of Multimodal Machine Translation
Desmond Elliott

Loss in Translation: Learning Bilingual Word Mapping with a Retrieval Criterion
Armand Joulin, Piotr Bojanowski, Tomas Mikolov, Hervé Jégou and Edouard Grave

Learning When to Concentrate or Divert Attention: Self-Adaptive Attention Temperature for Neural Machine Translation
Junyang Lin, Xu Sun, Xuancheng Ren, Muyu Li and Qi Su

Accelerating Asynchronous Stochastic Gradient Descent for Neural Machine Translation
Nikolay Bogoychev, Kenneth Heafield, Alham Fikri Aji and Marcin Junczys-Dowmunt

Learning to Jointly Translate and Predict Dropped Pronouns with a Shared Reconstruction Mechanism
Longyue Wang, Zhaopeng Tu, Andy Way and Qun Liu

Getting Gender Right in Neural Machine Translation
Eva Vanmassenhove, Christian Hardmeier and Andy Way

Towards Two-Dimensional Sequence to Sequence Model in Neural Machine Translation
Parnia Bahar, Christopher Brix and Hermann Ney

End-to-End Non-Autoregressive Neural Machine Translation with Connectionist Temporal Classification
Jindřich Libovický and Jindřich Helcl

Prediction Improves Simultaneous Neural Machine Translation
Ashkan Alinejad, Maryam Siahbani and Anoop Sarkar

Training Deeper Neural Machine Translation Models with Transparent Attention
Ankur Bapna, Mia Chen, Orhan Firat, Yuan Cao and Yonghui Wu

Context and Copying in Neural Machine Translation
Rebecca Knowles and Philipp Koehn

Encoding Gated Translation Memory into Neural Machine Translation
Qian Cao and Deyi Xiong

Automatic Post-Editing of Machine Translation: A Neural Programmer-Interpreter Approach
Thuy-Trang Vu and Gholamreza Haffari

Breaking the Beam Search Curse: A Study of (Re-)Scoring Methods and Stopping Criteria for Neural Machine Translation
Yilin Yang, Liang Huang and Mingbo Ma

Multi-Multi-View Learning: Multilingual and Multi-Representation Entity Typing
Yadollah Yaghoobzadeh and Hinrich Schütze

Word Embeddings for Code-Mixed Language Processing
Adithya Pratapa, Monojit Choudhury and Sunayana Sitaram

On the Strength of Character Language Models for Multilingual Named Entity Recognition
Xiaodong Yu, Stephen Mayhew, Mark Sammons and Dan Roth

Code-switched Language Models Using Dual RNNs and Same-Source Pretraining
Saurabh Garg, Tanmay Parekh and Preethi Jyothi

Part-of-Speech Tagging for Code-Switched, Transliterated Texts without Explicit Language Identification
Kelsey Ball and Dan Garrette

14:45–15:00 ***Mini-Break***

15:00–16:00 ***Keynote II: Gideon Mann "Understanding the News that Moves Markets" (Gold Hall)***

16:00–16:30 ***Coffee Break***

Saturday, November 3, 2018 (continued)

16:30–18:00 ***Long Papers and Demos (Orals and Posters) V***

Session 8A: Text Categorization (Gold Hall)

16:30–16:48 *Zero-shot User Intent Detection via Capsule Neural Networks*
Congying Xia, Chenwei Zhang, Xiaohui Yan, Yi Chang and Philip Yu

16:48–17:06 *Hierarchical Neural Networks for Sequential Sentence Classification in Medical Scientific Abstracts*
Di Jin and Peter Szolovits

17:06–17:24 *Investigating Capsule Networks with Dynamic Routing for Text Classification*
Min Yang, Wei Zhao, Jianbo Ye, Zeyang Lei, Zhou Zhao and Soufei Zhang

17:24–17:42 *Topic Memory Networks for Short Text Classification*
Jichuan Zeng, Jing Li, Yan Song, Cuiyun Gao, Michael R. Lyu and Irwin King

17:42–18:00 *Few-Shot and Zero-Shot Multi-Label Learning for Structured Label Spaces*
Anthony Rios and Ramakanth Kavuluru

Session 8B: Generation (Copper Hall)

16:30–16:48 *Automatic Poetry Generation with Mutual Reinforcement Learning*
Xiaoyuan Yi, Maosong Sun, Ruoyu Li and Wenhao Li

16:48–17:06 *Variational Autoregressive Decoder for Neural Response Generation*
Jiachen Du, Wenjie Li, Yulan He, Ruifeng Xu, Lidong Bing and Xuan Wang

17:06–17:24 *Integrating Transformer and Paraphrase Rules for Sentence Simplification*
Sanqiang Zhao, Rui Meng, Daqing He, Andi Saptono and Bambang Parmanto

17:24–17:42 *Learning Neural Templates for Text Generation*
Sam Wiseman, Stuart Shieber and Alexander Rush

Saturday, November 3, 2018 (continued)

17:42–18:00 *Multi-Reference Training with Pseudo-References for Neural Translation and Text Generation*
Renjie Zheng, Mingbo Ma and Liang Huang

Session 8C: Knowledge Graphs (Silver Hall)

16:30–16:48 *Knowledge Graph Embedding with Hierarchical Relation Structure*
Zhao Zhang, Fuzhen Zhuang, Meng Qu, Fen Lin and Qing He

16:48–17:06 *Embedding Multimodal Relational Data for Knowledge Base Completion*
Pouya Pezeshkpour, Liyan Chen and Sameer Singh

17:06–17:24 *Multi-Task Identification of Entities, Relations, and Coreference for Scientific Knowledge Graph Construction*
Yi Luan, Luheng He, Mari Ostendorf and Hannaneh Hajishirzi

17:24–17:42 *Playing 20 Question Game with Policy-Based Reinforcement Learning*
Huang Hu, Xianchao Wu, Bingfeng Luo, Chongyang Tao, Can Xu, wei wu and Zhan Chen

17:42–18:00 *Multi-Hop Knowledge Graph Reasoning with Reward Shaping*
Xi Victoria Lin, Richard Socher and Caiming Xiong

Session 8D: Morphology / Phonology (Hall 100)

16:30–16:48 *Neural Transductive Learning and Beyond: Morphological Generation in the Minimal-Resource Setting*
Katharina Kann and Hinrich Schütze

16:48–17:06 *Implicational Universals in Stochastic Constraint-Based Phonology*
Giorgio Magri

17:06–17:24 *Explaining Character-Aware Neural Networks for Word-Level Prediction: Do They Discover Linguistic Rules?*
Fréderic Godin, Kris Demuynck, Joni Dambre, Wesley De Neve and Thomas Demeester

17:24–17:42 *Adapting Word Embeddings to New Languages with Morphological and Phonological Subword Representations*
Aditi Chaudhary, Chunting Zhou, Lori Levin, Graham Neubig, David R. Mortensen and Jaime Carbonell

17:42–18:00 (TACL) Recurrent Neural Networks in Linguistic Theory: Revisiting Pinker and Prince (1988) and the Past Tense Debate
Christo Kirov and Ryan Cotterell

Session 8E: Sentiment, Social Applications, Multimodal Semantics, Discourse (Posters and Demos, Grand Hall 2)

A Computational Exploration of Exaggeration
Enrica Troiano, Carlo Strapparava, Gözde Özbal and Serra Sinem Tekiroglu

Building Context-aware Clause Representations for Situation Entity Type Classification
Zeyu Dai and Ruihong Huang

Hierarchical Dirichlet Gaussian Marked Hawkes Process for Narrative Reconstruction in Continuous Time Domain
Yeon Seonwoo, Alice Oh and Sungjoon Park

Investigating the Role of Argumentation in the Rhetorical Analysis of Scientific Publications with Neural Multi-Task Learning Models
Anne Lauscher, Goran Glavaš, Simone Paolo Ponzetto and Kai Eckert

Neural Ranking Models for Temporal Dependency Structure Parsing
Yuchen Zhang and Nianwen Xue

Causal Explanation Analysis on Social Media
Youngseo Son, Nipun Bayas and H. Andrew Schwartz

LRMM: Learning to Recommend with Missing Modalities
Cheng Wang, Mathias Niepert and Hui Li

Content Explorer: Recommending Novel Entities for a Document Writer
Michal Lukasik and Richard Zens

A Genre-Aware Attention Model to Improve the Likability Prediction of Books
Suraj Maharjan, Manuel Montes, Fabio A. González and Thamar Solorio

Thread Popularity Prediction and Tracking with a Permutation-invariant Model
Hou Pong Chan and Irwin King

IARM: Inter-Aspect Relation Modeling with Memory Networks in Aspect-Based Sentiment Analysis
Navonil Majumder, Soujanya Poria, Alexander Gelbukh, Md Shad Akhtar, Erik Cambria and Asif Ekbal

Limbic: Author-Based Sentiment Aspect Modeling Regularized with Word Embeddings and Discourse Relations
Zhe Zhang and Munindar Singh

An Interpretable Neural Network with Topical Information for Relevant Emotion Ranking
Yang Yang, Deyu ZHOU and Yulan He

Multi-grained Attention Network for Aspect-Level Sentiment Classification
Feifan Fan, Yansong Feng and Dongyan Zhao

Attentive Gated Lexicon Reader with Contrastive Contextual Co-Attention for Sentiment Classification
Yi Tay, Anh Tuan Luu, Siu Cheung Hui and Jian Su

Contextual Inter-modal Attention for Multi-modal Sentiment Analysis
Deepanway Ghosal, Md Shad Akhtar, Dushyant Chauhan, Soujanya Poria, Asif Ekbal and Pushpak Bhattacharyya

Adaptive Semi-supervised Learning for Cross-domain Sentiment Classification
Ruidan He, Wee Sun Lee, Hwee Tou Ng and Daniel Dahlmeier

ExtRA: Extracting Prominent Review Aspects from Customer Feedback
Zhiyi Luo, Shanshan Huang, Frank F. Xu, Bill Yuchen Lin, Hanyuan Shi and Kenny Zhu

Cross-Lingual Cross-Platform Rumor Verification Pivoting on Multimedia Content
Weiming Wen, Songwen Su and Zhou Yu

Extractive Adversarial Networks: High-Recall Explanations for Identifying Personal Attacks in Social Media Posts
Samuel Carton, Qiaozhu Mei and Paul Resnick

Automatic Detection of Vague Words and Sentences in Privacy Policies
Logan Lebanoff and Fei Liu

Multi-view Models for Political Ideology Detection of News Articles
Vivek Kulkarni, Junting Ye, Steve Skiena and William Yang Wang

Saturday, November 3, 2018 (continued)

Predicting Factuality of Reporting and Bias of News Media Sources
Ramy Baly, Georgi Karadzhov, Dimitar Alexandrov, James Glass and Preslav Nakov

Legal Judgment Prediction via Topological Learning
Haoxi Zhong, Guo Zhipeng, Cunchao Tu, Chaojun Xiao, Zhiyuan Liu and Maosong Sun

Hierarchical CVAE for Fine-Grained Hate Speech Classification
Jing Qian, Mai ElSherief, Elizabeth Belding and William Yang Wang

Residualized Factor Adaptation for Community Social Media Prediction Tasks
Mohammadzaman Zamani, H. Andrew Schwartz, Veronica Lynn, Salvatore Giorgi and Niranjan Balasubramanian

Framing and Agenda-setting in Russian News: a Computational Analysis of Intricate Political Strategies
Anjalie Field, Doron Kliger, Shuly Wintner, Jennifer Pan, Dan Jurafsky and Yulia Tsvetkov

Identifying the sentiment styles of YouTube's vloggers
Bennett Kleinberg, Maximilian Mozes and Isabelle van der Vegt

Native Language Identification with User Generated Content
Gili Goldin, Ella Rabinovich and Shuly Wintner

Demo: Visualization of the Topic Space of Argument Search Results in args.me
Yamen Ajjour, Henning Wachsmuth, Dora Kiesel, Patrick Riehmann, Fan Fan, Giuliano Castiglia, Rosemary Adejoh, Bernd Fröhlich, and Benno Stein

Saturday, November 3, 2018 (continued)

Demo: A Multilingual Information Extraction Pipeline for Investigative Journalism
Gregor Wiedemann, Seid Muhie Yimam, and Chris Biemann

Demo: When science journalism meets artificial intelligence : An interactive demonstration
Raghuram Vadapalli, Bakhtiyar Syed, Nishant Prabhu, Balaji Vasan Srinivasan, and Vasudeva Varma

19:00–22:00 ***Social Event (Royal Museums of Fine Arts of Belgium)***

Sunday, November 4, 2018

09:00–10:30 ***Long Papers and Demos (Orals and Posters) VI***

Session 9A: Machine Translation II (Gold Hall)

09:00–09:18 *Beyond Error Propagation in Neural Machine Translation: Characteristics of Language Also Matter*
Lijun Wu, Xu Tan, Di He, Fei Tian, Tao Qin, Jianhuang Lai and Tie-Yan Liu

09:18–09:36 *A Study of Reinforcement Learning for Neural Machine Translation*
Lijun Wu, Fei Tian, Tao Qin, Jianhuang Lai and Tie-Yan Liu

09:36–09:54 *Meta-Learning for Low-Resource Neural Machine Translation*
Jiatao Gu, Yong Wang, Yun Chen, Victor O. K. Li and Kyunghyun Cho

09:54–10:12 *Unsupervised Statistical Machine Translation*
Mikel Artetxe, Gorka Labaka and Eneko Agirre

10:12–10:30 *A Visual Attention Grounding Neural Model for Multimodal Machine Translation*
Mingyang Zhou, Runxiang Cheng, Yong Jae Lee and Zhou Yu

Sunday, November 4, 2018 (continued)

Session 9B: Sentiment I (Copper Hall)

09:00–09:18 *Sentiment Classification towards Question-Answering with Hierarchical Matching Network*
Chenlin Shen, Changlong Sun, Jingjing Wang, Yangyang Kang, Shoushan Li, Xiaozhong Liu, Luo Si, Min Zhang and Guodong Zhou

09:18–09:36 *Cross-topic Argument Mining from Heterogeneous Sources*
Christian Stab, Tristan Miller, Benjamin Schiller, Pranav Rai and Iryna Gurevych

09:36–09:54 *Summarizing Opinions: Aspect Extraction Meets Sentiment Prediction and They Are Both Weakly Supervised*
Stefanos Angelidis and Mirella Lapata

09:54–10:12 *CARER: Contextualized Affect Representations for Emotion Recognition*
Elvis Saravia, Hsien-Chi Toby Liu, Yen-Hao Huang, Junlin Wu and Yi-Shin Chen

10:12–10:30 (TACL) Adversarial Deep Averaging Networks for Cross-Lingual Sentiment Classification
Xilun Chen, Yu Sun, Ben Athiwaratkun, Claire Cardie, and Kilian Weinberger

Session 9C: Machine Learning III (Silver Hall)

09:00–09:18 *Noise Contrastive Estimation and Negative Sampling for Conditional Models: Consistency and Statistical Efficiency*
Zhuang Ma and Michael Collins

09:18–09:36 *CaLcs: Continuously Approximating Longest Common Subsequence for Sequence Level Optimization*
Semih Yavuz, Chung-Cheng Chiu, Patrick Nguyen and Yonghui Wu

09:36–09:54 *Pathologies of Neural Models Make Interpretations Difficult*
Shi Feng, Eric Wallace, Alvin Grissom II, Mohit Iyyer, Pedro Rodriguez and Jordan Boyd-Graber

09:54–10:12 *Phrase-level Self-Attention Networks for Universal Sentence Encoding*
Wei Wu, Houfeng Wang, Tianyu Liu and Shuming Ma

10:12–10:30 *BanditSum: Extractive Summarization as a Contextual Bandit*
Yue Dong, Yikang Shen, Eric Crawford, Herke van Hoof and Jackie Chi Kit Cheung

Session 9D: Semantics VI (Hall 100)

09:00–09:18 *A Word-Complexity Lexicon and A Neural Readability Ranking Model for Lexical Simplification*
Mounica Maddela and Wei Xu

09:18–09:36 *Learning Latent Semantic Annotations for Grounding Natural Language to Structured Data*
Guanghui Qin, Jin-Ge Yao, Xuening Wang, Jinpeng Wang and Chin-Yew Lin

09:36–09:54 *Syntactic Scaffolds for Semantic Structures*
Swabha Swayamdipta, Sam Thomson, Kenton Lee, Luke Zettlemoyer, Chris Dyer and Noah A. Smith

09:54–10:12 *Hierarchical Quantized Representations for Script Generation*
Noah Weber, Leena Shekhar, Niranjan Balasubramanian and Nate Chambers

10:12–10:30 *Semantic Role Labeling for Learner Chinese: the Importance of Syntactic Parsing and L2-L1 Parallel Data*
Zi Lin, Yuguang Duan, Yuanyuan Zhao, Weiwei Sun and Xiaojun Wan

Session 9E: Generation, Dialog, Summarization; Vision and Language II (Posters and Demos, Grand Hall 2)

A Teacher-Student Framework for Maintainable Dialog Manager
Weikang Wang, Jiajun Zhang, Han Zhang, Mei-Yuh Hwang, Chengqing Zong and Zhifei Li

Discriminative Deep Dyna-Q: Robust Planning for Dialogue Policy Learning
Shang-Yu Su, Xiujun Li, Jianfeng Gao, Jingjing Liu and Yun-Nung Chen

A Self-Attentive Model with Gate Mechanism for Spoken Language Understanding
Changliang Li, Liang Li and Ji Qi

Learning End-to-End Goal-Oriented Dialog with Multiple Answers
Janarthanan Rajendran, Jatin Ganhotra, Satinder Singh and Lazaros Polymenakos

AirDialogue: An Environment for Goal-Oriented Dialogue Research
Wei Wei, Quoc Le, Andrew Dai and Jia Li

(TACL) Polite Dialogue Generation Without Parallel Data
Tong Niu and Mohit Bansal

QuaSE: Sequence Editing under Quantifiable Guidance
Yi Liao, Lidong Bing, Piji Li, Shuming Shi, Wai Lam and Tong Zhang

Paraphrase Generation with Deep Reinforcement Learning
Zichao Li, Xin Jiang, Lifeng Shang and Hang Li

Operation-guided Neural Networks for High Fidelity Data-To-Text Generation
Feng Nie, Jinpeng Wang, Jin-Ge Yao, Rong Pan and Chin-Yew Lin

Generating Classical Chinese Poems via Conditional Variational Autoencoder and Adversarial Training
Juntao Li, Yan Song, Haisong Zhang, Dongmin Chen, Shuming Shi, Dongyan Zhao and Rui Yan

Paragraph-level Neural Question Generation with Maxout Pointer and Gated Self-attention Networks
Yao Zhao, Xiaochuan Ni, Yuanyuan Ding and Qifa Ke

Spider: A Large-Scale Human-Labeled Dataset for Complex and Cross-Domain Semantic Parsing and Text-to-SQL Task
Tao Yu, Rui Zhang, Kai Yang, Michihiro Yasunaga, Dongxu Wang, Zifan Li, James Ma, Irene Li, Qingning Yao, Shanelle Roman, Zilin Zhang and Dragomir Radev

Unsupervised Natural Language Generation with Denoising Autoencoders
Markus Freitag and Scott Roy

Answer-focused and Position-aware Neural Question Generation
Xingwu Sun, Jing Liu, Yajuan Lyu, Wei He, Yanjun Ma and Shi Wang

Diversity-Promoting GAN: A Cross-Entropy Based Generative Adversarial Network for Diversified Text Generation
Jingjing Xu, Xuancheng Ren, Junyang Lin and Xu Sun

Towards a Better Metric for Evaluating Question Generation Systems
Preksha Nema and Mitesh M. Khapra

Stylistic Chinese Poetry Generation via Unsupervised Style Disentanglement
Cheng Yang, Maosong Sun, Xiaoyuan Yi and Wenhao Li

Generating More Interesting Responses in Neural Conversation Models with Distributional Constraints
Ashutosh Baheti, Alan Ritter, Jiwei Li and Bill Dolan

Better Conversations by Modeling, Filtering, and Optimizing for Coherence and Diversity
Xinnuo Xu, Ondřej Dušek, Ioannis Konstas and Verena Rieser

Incorporating Background Knowledge into Video Description Generation
Spencer Whitehead, Heng Ji, Mohit Bansal, Shih-Fu Chang and Clare Voss

Multimodal Differential Network for Visual Question Generation
Badri Narayana Patro, Sandeep Kumar, Vinod Kumar Kurmi and Vinay Namboodiri

Entity-aware Image Caption Generation
Di Lu, Spencer Whitehead, Lifu Huang, Heng Ji and Shih-Fu Chang

Learning to Describe Differences Between Pairs of Similar Images
Harsh Jhamtani and Taylor Berg-Kirkpatrick

Object Hallucination in Image Captioning
Anna Rohrbach, Lisa Anne Hendricks, Kaylee Burns, Trevor Darrell and Kate Saenko

Abstractive Text-Image Summarization Using Multi-Modal Attentional Hierarchical RNN
Jingqiang Chen and Hai Zhuge

Keyphrase Generation with Correlation Constraints
Jun Chen, Xiaoming Zhang, Yu Wu, Zhao Yan and Zhoujun Li

Closed-Book Training to Improve Summarization Encoder Memory
Yichen Jiang and Mohit Bansal

Improving Neural Abstractive Document Summarization with Structural Regularization
Wei Li, Xinyan Xiao, Yajuan Lyu and Yuanzhuo Wang

Iterative Document Representation Learning Towards Summarization with Polishing
Xiuying Chen, Shen Gao, Chongyang Tao, Yan Song, Dongyan Zhao and Rui Yan

Bottom-Up Abstractive Summarization
Sebastian Gehrmann, Yuntian Deng and Alexander Rush

Controlling Length in Abstractive Summarization Using a Convolutional Neural Network
Yizhu Liu, Zhiyi Luo and Kenny Zhu

APRIL: Interactively Learning to Summarise by Combining Active Preference Learning and Reinforcement Learning
Yang Gao, Christian M. Meyer and Iryna Gurevych

Adapting the Neural Encoder-Decoder Framework from Single to Multi-Document Summarization
Logan Lebanoff, Kaiqiang Song and Fei Liu

Semi-Supervised Learning for Neural Keyphrase Generation
Hai Ye and Lu Wang

MSMO: Multimodal Summarization with Multimodal Output
Junnan Zhu, Haoran Li, Tianshang Liu, Yu Zhou, Jiajun Zhang and Chengqing Zong

Frustratingly Easy Model Ensemble for Abstractive Summarization
Hayato Kobayashi

Automatic Pyramid Evaluation Exploiting EDU-based Extractive Reference Summaries
Tsutomu Hirao, Hidetaka Kamigaito and Masaaki Nagata

Learning to Encode Text as Human-Readable Summaries using Generative Adversarial Networks
Yaushian Wang and Hung-yi Lee

Demo: Visualizing Group Dynamics based on Multiparty Meeting Understanding
Ni Zhang, Tongtao Zhang, Indrani Bhattacharya, Heng Ji, and Rich Radke

Demo: PizzaPal: Conversational Pizza Ordering using a High-Density Conversational AI Platform
Antoine Raux, Yi Ma, Paul Yang, and Felicia Wong

Demo: Developing Production-Level Conversational Interfaces with Shallow Semantic Parsing
Arushi Raghuvanshi, Lucien Carroll, and Karthik Raghunathan

Demo: SyntaViz: Visualizing Voice Queries through a Syntax-Driven Hierarchical Ontology
Md Iftekhar Tanveer and Ferhan Ture

Demo: LIA: A Natural Language Programmable Personal Assistant
Igor Labutov, Shashank Srivastava, and Tom Mitchell

Demo: Data2Text Studio: Automated Text Generation from Structured Data
Longxu Dou, Guanghui Qin, Jinpeng Wang, Jin-Ge Yao, and Chin-Yew Lin

Demo: Demonstrating Par4Sem - A Semantic Writing Aid with Adaptive Paraphrasing
Seid Muhie Yimam and Chris Biemann

10:30–11:00 ***Coffee Break***

11:00–12:30 ***Long Papers and Demos (Orals and Posters) VII***

Session 10A: Question Answering III (Gold Hall)

11:00–11:18 *Joint Multitask Learning for Community Question Answering Using Task-Specific Embeddings*
Shafiq Joty, Lluís Màrquez and Preslav Nakov

11:18–11:36 *What Makes Reading Comprehension Questions Easier?*
Saku Sugawara, Kentaro Inui, Satoshi Sekine and Akiko Aizawa

11:36–11:54 *Commonsense for Generative Multi-Hop Question Answering Tasks*
Lisa Bauer, Yicheng Wang and Mohit Bansal

11:54–12:12 *Open Domain Question Answering Using Early Fusion of Knowledge Bases and Text*
Haitian Sun, Bhuwan Dhingra, Manzil Zaheer, Kathryn Mazaitis, Ruslan Salakhutdinov and William Cohen

12:12–12:30 *A Nil-Aware Answer Extraction Framework for Question Answering*
Souvik Kundu and Hwee Tou Ng

Session 10B: Machine Translation III (Copper Hall)

11:00–11:18 *Exploiting Deep Representations for Neural Machine Translation*
Zi-Yi Dou, Zhaopeng Tu, Xing Wang, Shuming Shi and Tong Zhang

11:18–11:36 *Why Self-Attention? A Targeted Evaluation of Neural Machine Translation Architectures*
Gongbo Tang, Mathias Müller, Annette Rios and Rico Sennrich

11:36–11:54 *Simplifying Neural Machine Translation with Addition-Subtraction Twin-Gated Recurrent Networks*
Biao Zhang, Deyi Xiong, jinsong su, Qian Lin and Huiji Zhang

11:54–12:12 *Speeding Up Neural Machine Translation Decoding by Cube Pruning*
Wen Zhang, Liang Huang, Yang Feng, Lei Shen and Qun Liu

12:12–12:30 *Revisiting Character-Based Neural Machine Translation with Capacity and Compression*
Colin Cherry, George Foster, Ankur Bapna, Orhan Firat and Wolfgang Macherey

Session 10C: Discourse (Silver Hall)

11:00–11:18 *A Skeleton-Based Model for Promoting Coherence Among Sentences in Narrative Story Generation*
Jingjing Xu, Xuancheng Ren, Yi Zhang, Qi Zeng, Xiaoyan Cai and Xu Sun

11:18–11:36 *NEXUS Network: Connecting the Preceding and the Following in Dialogue Generation*
Xiaoyu Shen, Hui Su, Wenjie Li and Dietrich Klakow

11:36–11:54 *A Neural Local Coherence Model for Text Quality Assessment*
Mohsen Mesgar and Michael Strube

11:54–12:12 *Deep Attentive Sentence Ordering Network*
Baiyun Cui, Yingming Li, Ming Chen and Zhongfei Zhang

12:12–12:30 *Getting to "Hearer-old": Charting Referring Expressions Across Time*
Ieva Staliūnaitė, Hannah Rohde, Bonnie Webber and Annie Louis

Session 10D: Evolution / Sociolinguistics (Hall 100)

11:00–11:18 *Making "fetch" happen: The influence of social and linguistic context on nonstandard word growth and decline*
Ian Stewart and Jacob Eisenstein

11:18–11:36 *Analyzing Correlated Evolution of Multiple Features Using Latent Representations*
Yugo Murawaki

11:36–11:54 *Capturing Regional Variation with Distributed Place Representations and Geographic Retrofitting*
Dirk Hovy and Christoph Purschke

11:54–12:12 *Characterizing Interactions and Relationships between People*
Farzana Rashid and Eduardo Blanco

12:12–12:30 *Why Swear? Analyzing and Inferring the Intentions of Vulgar Expressions*
Eric Holgate, Isabel Cachola, Daniel Preoţiuc-Pietro and Junyi Jessy Li

Session 10E: Machine Learning (Posters and Demos, Grand Hall 2)

Is it Time to Swish? Comparing Deep Learning Activation Functions Across NLP tasks
Steffen Eger, Paul Youssef and Iryna Gurevych

Hard Non-Monotonic Attention for Character-Level Transduction
Shijie Wu, Pamela Shapiro and Ryan Cotterell

Speed Reading: Learning to Read ForBackward via Shuttle
Tsu-Jui Fu and Wei-Yun Ma

Modeling Localness for Self-Attention Networks
Baosong Yang, Zhaopeng Tu, Derek F. Wong, Fandong Meng, Lidia S. Chao and Tong Zhang

Chargrid: Towards Understanding 2D Documents
Anoop R Katti, Christian Reisswig, Cordula Guder, Sebastian Brarda, Steffen Bickel, Johannes Höhne and Jean Baptiste Faddoul

Simple Recurrent Units for Highly Parallelizable Recurrence
Tao Lei, Yu Zhang, Sida I. Wang, Hui Dai and Yoav Artzi

NPRF: A Neural Pseudo Relevance Feedback Framework for Ad-hoc Information Retrieval
Canjia Li, Yingfei Sun, Ben He, Le Wang, Kai Hui, Andrew Yates, Le Sun and Jungang Xu

Co-Stack Residual Affinity Networks with Multi-level Attention Refinement for Matching Text Sequences
Yi Tay, Anh Tuan Luu and Siu Cheung Hui

Spherical Latent Spaces for Stable Variational Autoencoders
Jiacheng Xu and Greg Durrett

Learning Universal Sentence Representations with Mean-Max Attention Autoencoder
Minghua Zhang, Yunfang Wu, Weikang Li and Wei Li

Word Mover's Embedding: From Word2Vec to Document Embedding
Lingfei Wu, Ian En-Hsu Yen, Kun Xu, Fangli Xu, Avinash Balakrishnan, Pin-Yu Chen, Pradeep Ravikumar and Michael J. Witbrock

Multilingual Clustering of Streaming News
Sebastião Miranda, Arturs Znotins, Shay B. Cohen and Guntis Barzdins

Multi-Task Label Embedding for Text Classification
Honglun Zhang, Liqiang Xiao, Wenqing Chen, Yongkun Wang and Yaohui Jin

Semantic-Unit-Based Dilated Convolution for Multi-Label Text Classification
Junyang Lin, Qi Su, Pengcheng Yang, Shuming Ma and Xu Sun

MCapsNet: Capsule Network for Text with Multi-Task Learning
Liqiang Xiao, Honglun Zhang, Wenqing Chen, Yongkun Wang and Yaohui Jin

Uncertainty-aware generative models for inferring document class prevalence
Katherine Keith and Brendan O'Connor

Challenges of Using Text Classifiers for Causal Inference
Zach Wood-Doughty, Ilya Shpitser and Mark Dredze

Direct Output Connection for a High-Rank Language Model
Sho Takase, Jun Suzuki and Masaaki Nagata

Disfluency Detection using Auto-Correlational Neural Networks
Paria Jamshid Lou, Peter Anderson and Mark Johnson

Pyramidal Recurrent Unit for Language Modeling
Sachin Mehta, Rik Koncel-Kedziorski, Mohammad Rastegari and Hannaneh Hajishirzi

On Tree-Based Neural Sentence Modeling
Haoyue Shi, Hao Zhou, Jiaze Chen and Lei Li

Language Modeling with Sparse Product of Sememe Experts
Yihong Gu, Jun Yan, Hao Zhu, Zhiyuan Liu, Ruobing Xie, Maosong Sun, Fen Lin and Leyu Lin

(TACL) Language Modeling for Morphologically Rich Languages: Character-Aware Modeling for Word-Level Prediction
Daniela Gerz, Ivan Vulic, Edoardo Maria, Jason Naradowsky, Roi Reichart, and Anna Korhonen

(TACL) Low-rank RNN Adaptation for Context-Aware Language Modeling
Aaron Jaech and Mari Ostendorf

Siamese Network-Based Supervised Topic Modeling
Minghui Huang, Yanghui Rao, Yuwei Liu, Haoran Xie and Fu Lee Wang

GraphBTM: Graph Enhanced Autoencoded Variational Inference for Biterm Topic Model
Qile Zhu, Zheng Feng and Xiaolin Li

Modeling Online Discourse with Coupled Distributed Topics
Akshay Srivatsan, Zachary Wojtowicz and Taylor Berg-Kirkpatrick

Learning Disentangled Representations of Texts with Application to Biomedical Abstracts
Sarthak Jain, Edward Banner, Jan-Willem van de Meent, Iain J Marshall and Byron C. Wallace

Multi-Source Domain Adaptation with Mixture of Experts
Jiang Guo, Darsh Shah and Regina Barzilay

Demo: Sisyphus, a Workflow Manager Designed for Machine Translation and Automatic Speech Recognition
Jan-Thorsten Peter, Eugen Beck, and Hermann Ney

Demo: APLenty: annotation tool for creating high-quality datasets using active and proactive learning
Minh-Quoc Nghiem and Sophia Ananiadou

Demo: KT-Speech-Crawler: Automatic Dataset Construction for Speech Recognition from YouTube Videos
Egor Lakomkin, Sven Magg, Cornelius Weber, and Stefan Wermter

Demo: Term Set Expansion based NLP Architect by Intel AI Lab
Jonathan Mamou, Oren Pereg, Moshe Wasserblat, Alon Eirew, Yael Green, Shira Guskin, Peter Izsak, and Daniel Korat

12:30–13:45 ***Lunch***

13:00–13:45 ***Business Meeting***

13:45–14:45 ***Short Papers (Orals and Posters) IV***

Session 11A: Analyzing Models (Gold Hall)

13:45–13:57 *A Neural Model of Adaptation in Reading*
Marten van Schijndel and Tal Linzen

13:57–14:09 *Understanding Deep Learning Performance through an Examination of Test Set Difficulty: A Psychometric Case Study*
John Lalor, Hao Wu, Tsendsuren Munkhdalai and Hong Yu

14:09–14:21 *Lexicosyntactic Inference in Neural Models*
Aaron Steven White, Rachel Rudinger, Kyle Rawlins and Benjamin Van Durme

14:21–14:33 *Dual Fixed-Size Ordinally Forgetting Encoding (FOFE) for Competitive Neural Language Models*
Sedtawut Watcharawittayakul, Mingbin Xu and Hui Jiang

14:33–14:45 *The Importance of Being Recurrent for Modeling Hierarchical Structure*
Ke Tran, Arianna Bisazza and Christof Monz

Session 11B: Sentiment II (Copper Hall)

13:45–13:57 *Joint Learning for Targeted Sentiment Analysis*
Dehong Ma, Sujian Li and Houfeng Wang

13:57–14:09 *Revisiting the Importance of Encoding Logic Rules in Sentiment Classification*
Kalpesh Krishna, Preethi Jyothi and Mohit Iyyer

14:09–14:21 *A Co-Attention Neural Network Model for Emotion Cause Analysis with Emotional Context Awareness*
Xiangju Li, Kaisong Song, Shi Feng, Daling Wang and Yifei Zhang

14:21–14:33 *Modeling Empathy and Distress in Reaction to News Stories*
Sven Buechel, Anneke Buffone, Barry Slaff, Lyle Ungar and Joao Sedoc

14:33–14:45 *Interpretable Emoji Prediction via Label-Wise Attention LSTMs*
Francesco Barbieri, Luis Espinosa Anke, Jose Camacho-Collados, Steven Schockaert and Horacio Saggion

Session 11C: Machine Translation IV (Silver Hall)

13:45–13:57 *A Tree-based Decoder for Neural Machine Translation*
Xinyi Wang, Hieu Pham, Pengcheng Yin and Graham Neubig

13:57–14:09 *Greedy Search with Probabilistic N-gram Matching for Neural Machine Translation*
Chenze Shao, Xilin Chen and Yang Feng

14:09–14:21 *Exploring Recombination for Efficient Decoding of Neural Machine Translation*
Zhisong Zhang, Rui Wang, Masao Utiyama, Eiichiro Sumita and Hai Zhao

14:21–14:33 *Has Machine Translation Achieved Human Parity? A Case for Document-level Evaluation*
Samuel Läubli, Rico Sennrich and Martin Volk

14:33–14:45 *Automatic Reference-Based Evaluation of Pronoun Translation Misses the Point*
Liane Guillou and Christian Hardmeier

Session 11D: QA / Knowledge Graphs (Hall 100)

13:45–13:57 *FewRel: A Large-Scale Supervised Few-Shot Relation Classification Dataset with State-of-the-Art Evaluation*
Xu Han, Hao Zhu, Pengfei Yu, Ziyun Wang, Yuan Yao, Zhiyuan Liu and Maosong Sun

13:57–14:09 *A strong baseline for question relevancy ranking*
Ana Gonzalez, Isabelle Augenstein and Anders Søgaard

14:09–14:21 *Learning Sequence Encoders for Temporal Knowledge Graph Completion*
Alberto Garcia-Duran, Sebastijan Dumančić and Mathias Niepert

14:21–14:33 *Similar but not the Same: Word Sense Disambiguation Improves Event Detection via Neural Representation Matching*
Weiyi Lu and Thien Huu Nguyen

14:33–14:45 *Learning Word Representations with Cross-Sentence Dependency for End-to-End Co-reference Resolution*
Hongyin Luo and Jim Glass

Session 11E: Short Posters IV (Grand Hall 2)

Word Relation Autoencoder for Unseen Hypernym Extraction Using Word Embeddings
Hong-You Chen, Cheng-Syuan Lee, Keng-Te Liao and Shou-de Lin

Refining Pretrained Word Embeddings Using Layer-wise Relevance Propagation
Akira Utsumi

Learning Gender-Neutral Word Embeddings
Jieyu Zhao, Yichao Zhou, Zeyu Li, Wei Wang and Kai-Wei Chang

Learning Concept Abstractness Using Weak Supervision
Ella Rabinovich, Benjamin Sznajder, Artem Spector, Ilya Shnayderman, Ranit Aharonov, David Konopnicki and Noam Slonim

Word Sense Induction with Neural biLM and Symmetric Patterns
Asaf Amrami and Yoav Goldberg

InferLite: Simple Universal Sentence Representations from Natural Language Inference Data
Jamie Kiros and William Chan

Similarity-Based Reconstruction Loss for Meaning Representation
Olga Kovaleva, Anna Rumshisky and Alexey Romanov

What can we learn from Semantic Tagging?
Mostafa Abdou, Artur Kulmizev, Vinit Ravishankar, Lasha Abzianidze and Johan Bos

Conditional Word Embedding and Hypothesis Testing via Bayes-by-Backprop
Rujun Han, Michael Gill, Arthur Spirling and Kyunghyun Cho

Classifying Referential and Non-referential It Using Gaze
Victoria Yaneva, Le An Ha, Richard Evans and Ruslan Mitkov

State-of-the-art Chinese Word Segmentation with Bi-LSTMs
Ji Ma, Kuzman Ganchev and David Weiss

Sanskrit Sandhi Splitting using seq2(seq)2
Rahul Aralikatte, Neelamadhav Gantayat, Naveen Panwar, Anush Sankaran and Senthil Mani

Unsupervised Neural Word Segmentation for Chinese via Segmental Language Modeling
Zhiqing Sun and Zhi-Hong Deng

LemmaTag: Jointly Tagging and Lemmatizing for Morphologically Rich Languages with BRNNs
Daniel Kondratyuk, Tomáš Gavenčiak, Milan Straka and Jan Hajič

Recovering Missing Characters in Old Hawaiian Writing
Brendan Shillingford and Oiwi Parker Jones

When data permutations are pathological: the case of neural natural language inference
Natalie Schluter and Daniel Varab

Bridging Knowledge Gaps in Neural Entailment via Symbolic Models
Dongyeop Kang, Tushar Khot, Ashish Sabharwal and Peter Clark

The BQ Corpus: A Large-scale Domain-specific Chinese Corpus For Sentence Semantic Equivalence Identification
Jing Chen, Qingcai Chen, Xin Liu, Haijun Yang, Daohe Lu and Buzhou Tang

Interpreting Recurrent and Attention-Based Neural Models: a Case Study on Natural Language Inference
Reza Ghaeini, Xiaoli Fern and Prasad Tadepalli

Towards Semi-Supervised Learning for Deep Semantic Role Labeling
Sanket Vaibhav Mehta, Jay Yoon Lee and Jaime Carbonell

Identifying Domain Adjacent Instances for Semantic Parsers
James Ferguson, Janara Christensen, Edward Li and Edgar Gonzàlez

Mapping natural language commands to web elements
Panupong Pasupat, Tian-Shun Jiang, Evan Liu, Kelvin Guu and Percy Liang

Wronging a Right: Generating Better Errors to Improve Grammatical Error Detection
Sudhanshu Kasewa, Pontus Stenetorp and Sebastian Riedel

Modeling Input Uncertainty in Neural Network Dependency Parsing
Rob van der Goot and Gertjan van Noord

Parameter sharing between dependency parsers for related languages
Miryam de Lhoneux, Johannes Bjerva, Isabelle Augenstein and Anders Søgaard

Grammar Induction with Neural Language Models: An Unusual Replication
Phu Mon Htut, Kyunghyun Cho and Samuel Bowman

Data Augmentation via Dependency Tree Morphing for Low-Resource Languages
Gozde Gul Sahin and Mark Steedman

14:45–15:00 ***Mini-Break***

15:00–16:00 ***Keynote III: Johan Bos "The Moment of Meaning and the Future of Computational Semantics" (Gold Hall)***

Sunday, November 4, 2018 (continued)

16:00–16:30 ***Coffee Break***

16:30–18:00 ***Best Paper Awards and Closing (Gold Hall)***

16:30–16:42 *How Much Reading Does Reading Comprehension Require? A Critical Investigation of Popular Benchmarks*
Divyansh Kaushik and Zachary C. Lipton

16:42–17:00 *MultiWOZ - A Large-Scale Multi-Domain Wizard-of-Oz Dataset for Task-Oriented Dialogue Modelling*
Paweł Budzianowski, Tsung-Hsien Wen, Bo-Hsiang Tseng, Iñigo Casanueva, Stefan Ultes, Osman Ramadan and Milica Gasic

17:00–17:18 *Linguistically-Informed Self-Attention for Semantic Role Labeling*
Emma Strubell, Patrick Verga, Daniel Andor, David Weiss and Andrew McCallum

17:18–17:36 *Phrase-Based & Neural Unsupervised Machine Translation*
Guillaume Lample, Myle Ott, Alexis Conneau, Ludovic Denoyer and Marc'Aurelio Ranzato