NAACL HLT 2018

The 2018 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies

Proceedings of the Conference
Volume 2 (Short Papers)

June 1-June 6, 2018
New Orleans, Louisiana

Diamond Sponsors

Platinum Sponsors

Gold Sponsors

Silver Sponsors

Bronze Sponsors

©2018 The Association for Computational Linguistics

Order copies of this and other ACL proceedings from:

Association for Computational Linguistics (ACL)
209 N. Eighth Street
Stroudsburg, PA 18360
USA
Tel: +1-570-476-8006
Fax: +1-570-476-0860
acl@aclweb.org

ISBN 978-1-948087-29-2

Message from the General Chair

Welcome to New Orleans and to NAACL HLT 2018 – the biggest NAACL to date. Natural Language Processing and Computational Linguistics is constantly growing and changing with a constant flow of new methods and topics. Every year also sees an even more exciting and diverse research community, with a steadily increasing number researchers, companies both large and small, and a vibrant community of practitioners and students who are excited at the prospect of taking on the newest challenges of the discipline. This year's NAACL HLT conference reflects what an exciting time this is for our field, and highlights the vibrancy and vitality of our community.

I feel extremely lucky to be able to work with a fantastic program committee, especially the two extremely dedicated, creative and resourceful program chairs: Amanda Stent and Heng Ji. Their innovations include a new review form, intended to elicit higher quality reviews, the opportunity for authors to review the reviewers, the Test-of-Time awards, and a program where poster and demo sessions run consistently in parallel to the oral sessions, in order to allow the conference to reflect the ever increasing diversity of research topics and the corresponding volume of accepted papers. I am especially excited about the new Test-of-Time papers award session, and hope to see this new innovation become a regular part of ACL conferences.

We have named the Test-of-Time award in memory of Aravind Joshi, who left us this year, after having a huge lifetime impact on our community. We will always remember him for his gentle conversational style, sharp focus, interest in linguistic, computational and mathematical properties of language, and his lifetime commitment to mentoring women in NLP. I feel extremely lucky to have been one of his Ph.D. students.

This year we also introduced an industrial track, with the aim of featuring papers that focus on scalable, interpretable, reliable and customer facing methods for industrial applications of Natural Language Processing. The idea of having such a track was proposed by Yunyao Li who strongly advocated for it: this proposal was then discussed and approved by the NAACL board. After that, it was all go, with an incredible amount of work to promote and organize it by the industrial track chairs: Jennifer Chu-Carroll, Yunyao Li and Srinivas Bangalore.

The overall program looks amazing and reflects the cooperative way that everyone on the committee worked together. What a team! I am so grateful for getting to be a part of this community of people, and I really appreciate the enthusiasm and attention to detail reflected in their hard work: Amanda Stent and Heng Ji (program chairs); Jennifer Chu-Carroll, Yunyao Li and Srinivas Bangalore (industrial track chairs); Ying Lin (website chair); Marie Meteer and Jason Williams (workshop co-chairs); Mohit Bansal and Rebecca Passonneau (tutorial co-chairs); Yang Liu, Tim Paek, and Manasi Patwardhan (demo co-chairs); Chris Callison-Burch and Beth Hockey (Family-Friendly Program Co-Chairs) Stephanie Lukin and Meg Mitchell (publication co-chairs); Jonathan May (handbook chair); Silvio Ricardo Cordeiro, Shereen Oraby, Umashanthi Pavalanathan, and Kyeongmin Rim (student cochairs) along with Swapna Somasundaran and Sam Bowman (Faculty Advisors) for the student research workshop; Lena Reed (student volunteer coordinator); Kristy Hollingshead, Kristen Johnson, and Parisa Kordjamshidi (local sponsorships and exhibits cochairs); Yonatan Bisk and Wei Xu (publicity and social media chairs); David Yarowsky and Joel Tetreault (treasurers) and Alexis Palmer and Jason Baldridge (the NAACL international Sponsorship Team). Also thanks to Rich at SoftConf for his speedy response to questions and his willingness to help us innovate with our new review form. And thanks to Julia Hockenmaier and the whole NAACL Executive Board for always being willing to consult on any issue.

The program highlights three keynote speakers in the main track: Dilek Hakkani-Tür, Kevin Knight, and Charles Yang. We also have two keynote speakers in the industry track: Mari Ostendorf and Daniel Marcu. These talks promising to be interesting across a range of issues from language acquisition in

children to the commercial possibilities of conversational agents. The industry track will also feature two panels, one on careers in industry (as compared to academia) and the other on ethics in NLP. The program also includes six tutorials featuring topics of current interest and sources of innovation in the field. We have sixteen workshops plus the student research workshop: some of these workshops have become events in themselves with many of them repeated each year. We will also have plenary sessions for the outstanding paper awards and the new Test-Of-Time papers award session.

Any event of this scale can only happen with the the hard work of a wonderful group of people. I especially want to thank the NAACL board for being willing to consult on a range of different issues and Priscilla Rasmussen for taking care of all the millions of details that need to be looked after every single day to make sure the logistical aspects of the conference come together. I want to especially thank Priscilla for her hard work and creativity organizing our social event: we first will go to Mardi Gras World to see the world of wonders created each year for the Mardi Gras. From there we go to the river, to the dockside River City Plaza and River City Ballroom for New Orleans' famous cuisine and libations and dancing to live Zydeco, funk, soul and R&B.

ACL has been working for several years to increase diversity at our conferences and in our community. So, taking inspiration from ACL 2017, we aimed to make NAACL family friendly, by providing childcare at the conference, and encouraging people to bring their families to the social events and breakfasts. Diversity can also be a consequence of the support for students to attend the conference that we receive from the NSF, CRA-CCC and CRA-W: this subsidizes student travel to the student research workshop as well as their registration and ACL memberships. When combined with the support we are able to give to our student volunteers, we aim to make it possible for students from all over the world to come to the conference and be part of our community. We also decided, in consultation with the NAACL board, to provide subsidies to the Widening NLP workshop, which is only being held for the second time at this year's NAACL (last year called the Women in NLP workshop). These subsidies enable participation from students and young researchers from developing countries to attend the conference.

I am grateful to our sponsors for their generous contributions, which add so much to what we can do at the conference. Our Diamond sponsors are Bloomberg, Google, and Toutiao AI Lab (ByteDance). The Platinum sponsor is Amazon. The Gold Sponsors are Ebay, Grammarly, IBM Research, KPMG, Oracle, Poly AI, Tulane University, Capital One and Two Sigma. The Silver sponsors are Nuance and Facebook, and the Bronze sponsors are iMerit and USC/ISI.

Finally, there are many more people who through their hard work and dedication have contributed to make this conference a success: the area chairs, workshop organizers, tutorial presenters, student mentors, and reviewers. And of course you all, the attendees without whom there would be no conference: you are the life and spirit of the conference and the NAACL community. I hope you all have a fun and exciting time at NAACL HLT 2018!

NAACL HLT 2018 General Chair
Marilyn Walker, University of California Santa Cruz

Message from the Program Co-Chairs

We welcome you to New Orleans for the 16th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL HLT 2018)! We had three primary goals for NAACL HLT 2018: construct a great program; manage the integrity and quality of the publication process; and ensure broad participation.

Construct a great program: NAACL HLT 2018 does have a great program, thanks to all of you! We will have three exciting keynotes, from Charles Yang, Kevin Knight and Dilek Hakkani-Tür. 331 research track papers (205 long, 125 short), accepted following peer review, will be presented[1]. Four of these papers have been identified as outstanding papers, and one will be named best paper. We will also feature a "Test of Time" session with retrospectives (from the authors) on three influential papers from ACL venues. We thank the committees who nominated and voted on these paper awards.

The main program at NAACL HLT 2018 also includes 16 TACL paper presentations, 20 demos, a student research workshop and an industry track. Keynotes from both the research and industry tracks are plenary. In a change from previous years of NAACL HLT, and motivated by EMNLP 2017, poster and oral presentation sessions will be held in parallel during the day. All posters are grouped thematically (including posters from the industry track and student research workshop and demos) and assigned to poster sessions so as to not be against oral presentation sessions with the same theme.

Manage the integrity and quality of the publication process: To manage load, we decided that each area chair should be responsible for no more than 30 submissions and that reviewers should be responsible for reviewing no more than 3 submissions. To help reviewers, we and the ACL program co-chairs constructed a more structured review form, with questions related to the new ACL guidelines on publication and reviewing, as well as to contribution types, experimental methods (thank you, Bonnie Webber!), software and handling of data.

We recruited an excellent group of 72 area chairs; we thank them for their leadership, and for nominating and voting on outstanding papers, outstanding reviewers and test of time papers. 1372 individuals reviewed papers for the conference (as program committee members, ad hoc reviewers or secondary reviewers); all but 49 reviewers had no more than 3 submissions to review overall, and the 49 reviewers who took on a heavier load did so voluntarily. We thank all our reviewers, especially the ad-hoc reviewers who provided last minute reviews and the outstanding reviewers identified by the area chairs.

Submissions were assigned to area chairs and reviewers using a combination of area chair expertise, Toronto Paper Matching System (TPMS) scores and reviewer bids. Both long and short paper submissions received 3 reviews each. Long paper authors had an opportunity to respond to reviews. Accept/reject suggestions were made by area chairs working in small groups of 2-3 and discussing with reviewers as necessary; final decisions were made by the program chairs. Where there was disagreement or discussion, one area chair wrote a short meta review that was shared with the authors.

This year, if the authors of a NAACL HLT 2018 submission and the author of a review for that submission both consented, then we will include the review in a review corpus to be released jointly with the program chairs of ACL, Iryna Gureyvich and Yusuke Miyao. We also asked authors of accepted papers to upload the source code for their papers. Both of these corpora will be released in the coming months.

The health of our field as a science is dependent on a scalable peer review process, which in turn depends on (a) conscientious effort from a broad pool of expert reviewers, and (b) tools, processes and policies that can structure and facilitate reviewing. As a field we are at a breaking point: we are growing rapidly,

[1]We received 1122 research track submissions (664 long, 458 short). 33 were rejected without review and 85 were withdrawn by the authors either before, during or after review.

with corresponding heavy load on experienced reviewers; and we lack good tools to manage the process. Peer review involves several tasks that we, as NLP researchers, ought to be uniquely qualified to address, including expertise sourcing, network analysis and text mining. We have written a proposal with other members of the ACL community about ways the ACL can improve our peer review infrastructure. We have also written a collection of "how to" documents that we will pass on to future conference organizers.

Ensure broad participation: To ensure broad participation, we recruited program committee members using a similar method to that used for NAACL HLT 2016: we invited anyone who had published repeatedly in ACL sponsored venues, who had a PhD or significant experience in the field spanning more than 5 years, and whose email address was up to date in START. We thank Dragomir Radev for giving us a list of names from the ACL anthology.

We also kept a blog where we discussed and attempted to "demystify" each stage of the publication process. This blog can be found at the conference website, `http://naacl2018.org`. We are very grateful to the researchers who wrote guest blog posts, including Justine Cassell, Barbara Plank, Preslav Nakov, Omer Levy, Gemma Boleda, Emily Bender, Nitin Madnani, David Chiang, Kevin Knight, Dan Bikel and Joakim Nivre.

On our blog, we reported on the diversity of our area chair, reviewer and author pools in terms of years of experience, affiliation type and geography, and gender. We will include these details in our report to the NAACL Executive Committee. We hope that future years' chairs will make similar reports.

The excellence of the overall NAACL HLT 2018 program is thanks to all the chairs and organizers. We especially thank the following people: Margaret Mitchell and Stephanie Lukin, the publication chairs; Jonathan May, the handbook chair; Yonatan Bisk and Wei Xu, the publicity and social media chairs; Ying Lin, the tireless website chair; and Marilyn Walker, the NAACL HLT 2018 general chair. We thank the chairs of NAACL HLT 2016 and ACL 2017 for their informative blogs, and the program chairs of NAACL HLT 2016, Owen Rambow and Ani Nenkova, for their advice. We thank the program co-chairs of ACL 2018, Iryna Gurevych and Yusuke Miyao, who have been very collaborative on matters related to reviewing. We thank Shuly Winter, who helped fix a serious START bug. We thank Julia Hockenmaier and the NAACL Executive Committee for their support. We are grateful for the professional work of Rich Gerber and his colleagues at SoftConf (START), and of Priscilla Rasmussen from the ACL.

It has been an enormous privilege for us to see the scientific advances that will be presented at this conference. We would like to close with some advice for you, the conference attendees.

- The presenters have made valuable contributions to our science; their oral, poster and demo presentations are worth your time and attention.
- Talk to some people you haven't previously met. They may be your future collaborators!
- You can follow the conference on social media; we have a conference app and website where we will post any updates to the program, and our twitter handle is @naaclhlt.
- This event is run by a professional organization with a code of conduct[2]. If you observe or are the recipient of unprofessional behavior, you may contact any current member of the ACL or NAACL Executive Committees, the NAACL HLT general chair (Marilyn Walker), us (the program chairs), or Priscilla Rasmussen (acl@aclweb.org). We will hold your communications in strict confidence and consult you before taking any action.

We look forward to a wonderful conference!

NAACL HLT 2018 Program Co-Chairs
Heng Ji, RPI
Amanda Stent, Bloomberg

[2] `https://www.aclweb.org/adminwiki/index.php?title=Anti-Harassment_Policy`

Organizing Committee

General Chair

Marilyn Walker, University of California, Santa Cruz

Program Co-Chairs

Heng Ji, Rensselaer Polytechnic Institute
Amanda Stent, Bloomberg

Industry Track Co-Chairs

Srinivas Bangalore, Interactions
Jennifer Chu-Carroll, Elemental Cognition
Yunyao Li, IBM

Demonstration Co-Chairs

Yang Liu, University of Texas at Dallas
Tim Paek, Apple
Manasi Patwardhan, Tata Consultancy Services Research, India

Student Research Workshop Co-Chairs

Chairs:

Silvio Ricardo Cordeiro, Aix-Marseille Université
Shereen Oraby, University of California, Santa Cruz
Umashanthi Pavalanathan, Georgia Institute of Technology
Kyeongmin Rim, Brandeis University

Faculty Advisors:

Swapna Somasundaran, ETS Princeton
Sam Bowman, New York University

Workshop Co-Chairs

Marie Meteer, Brandeis University
Jason Williams, Microsoft Research

Tutorial Co-Chairs

Mohit Bansal, University of North Carolina
Rebecca Passonneau, Pennsylvania State University

Publications Co-Chairs

Stephanie Lukin, U.S. Army Research Laboratory
Margaret Mitchell, Google

Handbook Chair

Jonathan May, University of Southern California Information Sciences Institute

Local Arrangements Chair

Priscilla Rasmussen, ACL

Family-Friendly Program Co-Chairs

Chris Callison-Burch, University of Pennsylvania
Beth Hockey, Intel

International Sponsorships Co-Chairs

Alexis Palmer, University of North Texas
Jason Baldridge, Google

Local Sponsorships and Exhibits Co-Chairs

Kristy Hollingshead, Florida Institute for Human & Machine Cognition
Kristen Johnson, Purdue University
Parisa Kordjamshidi, Tulane University / Florida Institute for Human and Machine Cognition

Publicity and Social Media Co-Chairs

Yonatan Bisk, University of Washington
Wei Xu, Ohio State University

Website Chair

Ying Lin, Rensselaer Polytechnic Institute

Student Volunteer Coordinator

Lena Reed, University of California, Santa Cruz

Program Committee, Research Track

Area Chairs

Cognitive Modeling/Psycholinguistics
- Morteza Dehghani, University of Southern California
- Kristy Hollingshead, Institute for Human & Machine Cognition

Dialogue and Interactive Systems
- Yun-Nung (Vivian) Chen, National Taiwan University
- Gabriel Skantze, KTH Royal Institute of Technology

Discourse and Pragmatics
- Jacob Eisenstein, Georgia Institute of Technology
- Junyi (Jessy) Li, University of Texas at Austin
- Annie Louis, University of Edinburgh
- Yi Yang, Bloomberg

Generation
- Dimitra Gkatzia, Edinburgh Napier University
- Shashi Narayan, University of Edinburgh
- Michael White, Ohio State University

Information Extraction
- Mausam, Indian Institute of Technology Delhi
- Dan Bikel, Google
- Chia-Hui Chang, National Central University
- Bonan Min, BBN
- Aurélie Névéol, CNRS

Marius Pasca, Google
Hinrich Schütze, Ludwig Maximilian University of Munich
Avirup Sil, IBM Research AI
Michael Strube, HITS gGmbH

Machine Learning for NLP

Chris Dyer, Google DeepMind
Ozan Irsoy, Bloomberg
Tie-Yan Liu, Microsoft Research
Raymond Mooney, University of Texas at Austin

Machine Translation

Marine Carpuat, University of Maryland
Kyunghyun Cho, New York University
Daniel Marcu, Amazon
Taro Watanabe, Google
Deyi Xiong, Soochow University

NLP Applications

Jinho Choi, Emory University
Joel Tetreault, Grammarly

Phonology, Morphology and Word Segmentation

Jennifer Foster, Dublin City University
Barbara Plank, University of Groningen

Question Answering

Eugene Agichtein, Emory University
Hannaneh Hajishirzi, University of Washington
Idan Szpektor, Google

Semantics

Yoav Artzi, Cornell University
Mona Diab, George Washington University
Kevin Duh, Johns Hopkins University
Jonathan May, University of Southern California
Preslav Nakov, Qatar Computing Research Institute
Roi Reichart, Technion - Israel Institute of Technology
Dan Roth, University of Pennsylvania
Scott Wen-tau Yih, Allen Institute for Artificial Intelligence

Sentiment Analysis

Smaranda Muresan, Columbia University
Swapna Somasundaran, ETS Princeton

Social Media Analysis and Computational Social Science

Mark Dredze, Johns Hopkins University
Miles Osborne, Bloomberg
Alan Ritter, Ohio State University
Sara Rosenthal, IBM
William Yang Wang, University of California, Santa Barbara

Speech

Eric Fosler-Lussier, Ohio State University
Dilek Hakkani-Tur, Google
Mari Ostendorf, University of Washington

Summarization

George Giannakopoulos, NCSR “Demokritos"
Xiaojun Wan, Peking University
Lu Wang, Northeastern University

Tagging, Chunking, Syntax and Parsing

Michael Collins, Columbia University
Yoav Goldberg, Bar Ilan University
Daisuke Kawahara, Kyoto University
Emily Pitler, Google
Anders Søgaard, University of Copenhagen
Aline Villavicencio, University of Essex / Federal University of Rio Grande do Sul

Text Mining

Kai-wei Chang, University of Virginia
Jing Jiang, Singapore Management University
Zornitsa Kozareva, Google
Chin-Yew Lin, Microsoft Research Asia

Theory and Formalisms

David Chiang, University of Notre Dame
Daniel Gildea, University of Rochester
Giorgio Satta, University of Padua

Vision, Robotics and Other Grounding

Joyce Chai, Michigan State University
Vicente Ordonez, University of Virginia

Reviewers

Reviewers who are acknowledged by the program committee for providing one or more outstanding reviews are listed in bold. Individuals who (also) served as secondary reviewers are marked with † and those who (also) served as ad-hoc reviewers with *.

Mourad Abbas
Ahmed Abdelali
Asad Abdi
Muhammad Abdul-Mageed
Anne Abeille
Omri Abend
Abhishek Abhishek
Mohamed Abouelenien
José Abreu
Sallam Abualhaija
Amjad Abu-Jbara
Lasha Abzianidze
Oliver Adams
Gilles Adda
Yvonne Adesam
Stergos Afantenos
Naveed Afzal
Apoorv Agarwal
Swati Agarwal
Željko Agić
Eugene Agichtein
Manex Agirrezabal
Lars Ahrenberg
Salah Ait-Mokhtar
Yamen Ajjour†
Alan Akbik
Ahmet Aker
Cem Akkaya*
Ahmad Al Sallab
Özge Alacam
Domagoj Alagić†
Sameh Alansary
Iñaki Alegria
Nikolaos Aletras
Beatrice Alex
Theodora Alexopoulou
Enrique Alfonseca
Ahmed Ali
Dimitris Alikaniotis
Hend Al-Khalifa
Mehdi Allahyari
Miltiadis Allamanis
James Allan
Alexandre Allauzen
Miguel A. Alonso
Omar Alonso
Laura Alonso Alemany
Abdulrahman Alosaimy
Rami Al-Rfou
Edgar Altszyler
Nora Al-Twairesh
Bharat Ram Ambati
Waleed Ammar*
Dimitra Anastasiou
Tim Anderson
Jacob Andreas
Nicholas Andrews
Ion Androutsopoulos
Anietie Andy
Gabor Angeli*
Marianna Apidianaki
Emilia Apostolova
Jun Araki
Masahiro Araki
Shlomo Argamon
Piyush Arora
Raman Arora
Sanjeev Arora
Masayuki Asahara
Elliott Ash
Nicholas Asher
Giuseppe Attardi

Aitziber Atutxa Salazar†
Isabelle Augenstein
Michael Auli
AiTi Aw
Amittai Axelrod
Wilker Aziz
Homa B. Hashemi
Collin Baker
Omid Bakhshandeh
Niranjan Balasubramanian
Timothy Baldwin
Tyler Baldwin
Kalika Bali
Miguel Ballesteros
Ramy Baly
David Bamman
Rafael E. Banchs
Ritwik Banerjee
Mohit Bansal
Libby Barak
Denilson Barbosa
Alistair Baron
Marco Baroni
Alberto Barrón-Cedeño
Valerio Basile
Roberto Basili
Tanmay Basu
Daniel Bauer
Timo Baumann
Anshul Bawa†
John Bear
Frédéric Béchet
Barend Beekhuizen
Beata Beigman Klebanov
Yonatan Belinkov
Charley Beller
Anja Belz
Michael Bendersky
Jonathan Berant
Raffaella Bernardi
Delphine Bernhard
Yevgeni Berzak
Steven Bethard
Rahul Bhagat
Chandra Bhagavatula
Aditya Bhargava†
Pushpak Bhattacharyya
Chris Biemann
Ann Bies
Or Biran
Yonatan Bisk
Prakhar Biyani
Yuri Bizzoni†
Anders Björkelund
Philippe Blache
Alan W Black
Eduardo Blanco
Roi Blanco
Nate Blaylock
Reihane Boghrati*
Bernd Bohnet
Piotr Bojanowski
Ondřej Bojar
Danushka Bollegala
Marcel Bollmann
Kalina Bontcheva
Benjamin Börschinger
Florian Boudin
Fethi Bougares
Pierrette Bouillon
Gosse Bouma
Johan Boye
Kristy Boyer
David Bracewell
Ellen Breitholz
Chris Brew
Ted Briscoe
Chris Brockett
Julian Brooke
Pawel Budzianowski†
Paul Buitelaar
Harry Bunt
Wray Buntine
David Burkett
Jill Burstein
Miriam Butt
Donna Byron
José G. C. de Souza
Aoife Cahill
Deng Cai†
Ruket Cakici
Iacer Calixto*
Chris Callison-Burch
Nicoletta Calzolari
Jose Camacho-Collados
Leonardo Campillos Llanos*†
Marie Candito
Kai Cao*
Liangliang Cao
Yuan Cao
Ziqiang Cao
Cornelia Caragea
Giuseppe Carenini
Mark Carman
Xavier Carreras
Vitor Carvalho
Francisco Casacuberta
Taylor Cassidy
Vittorio Castelli
Damir Cavar
Asli Celikyilmaz
Daniel Cer
Özlem Çetinoğlu*
Soumen Chakrabarti
Tanmoy Chakraborty
Yllias Chali
Nathanael Chambers
Yee Seng Chan
Muthu Kumar Chandrasekaran
Angel Chang
Franklin Chang
Yin-Wen Chang
Yung-Chun Chang
Lidia S. Chao
Snigdha Chaturvedi
Wanxiang Che
Ciprian Chelba
Berlin Chen
Bin Chen
Boxing Chen
Changyou Chen
Chen Chen
Cheng Chen
Hsin-Hsi Chen
Jianfu Chen
John Chen
Kehai Chen†
Kuan-Yu Chen
Ping Chen
Qian Chen
Qingcai Chen
Wenliang Chen
Xinchi Chen
Yubo Chen
Zhiyuan Chen
Jianpeng Cheng
Pengxiang Cheng†
Weiwei Cheng
Hadda Cherroun
Colin Cherry
Emmanuele Chersoni†
Sean Chester
Jackie Chi Kit Cheung

Niyati Chhaya
Lianhua Chi
Hai Leong Chieu
Manoj Chinnakotla
Laura Chiticariu
Martin Chodorow
Eunsol Choi
Jinho D. Choi
Key-Sun Choi
Shamil Chollampatt
Monojit Choudhury
Christos Christodoulopoulos
Jason Chuang
Junyoung Chung
Tagyoung Chung
Kenneth Church
Philipp Cimiano
Alina Maria Ciobanu
Stephen Clark
Mathieu Cliche
Martin Cmejrek
Kevin Cohen
Shay B. Cohen
William Cohen
Michael Collins*
Çağrı Çöltekin*
John Conroy
Matthieu Constant
Paul Cook
Matthew Coole†
Robin Cooper
Silvio Cordeiro*
Mark Core
Marta R. Costa-jussà
Ryan Cotterell
Aaron Courville
Benoit Crabbé
Josep Crego
Dan Cristea
Danilo Croce
Paul Crook
Scott Crossley
Heriberto Cuayáhuitl
Lei Cui
Xiaodong Cui
Yiming Cui
Aron Culotta
Giovanni Da San Martino
Walter Daelemans
Andrew Dai
Bo Dai*
Beatrice Daille
Bhavana Dalvi
Marco Damonte
Falavigna Daniele
Kareem Darwish
Dipanjan Das
Pradipto Das
Sarthak Dash
Hal Daumé III
Johannes Daxenberger
Adrià de Gispert
Eric De La Clergerie
Marie-Catherine de Marneffe
Gerard de Melo
Renato de Mori
Edward Dearden†
Luciano Del Corro
Louise Deléger
Rodolfo Delmonte
Dina Demner-Fushman
Steve DeNeefe
John DeNero
Lingjia Deng
Zhi-Hong Deng
Pascal Denis
Michael Denkowski
Tejaswini Deoskar
Nina Dethlefs
Luis Fernando D'Haro
Giuseppe Di Fabbrizio
Weicong Ding
Stefanie Dipper
Nemanja Djuric
Simon Dobnik
Ellen Dodge
Jesse Dodge
Daxiang Dong
Li Dong
Bonnie Dorr
Doug Downey
Eduard Dragut
Mark Dras
Markus Dreyer
Aleksandr Drozd
Jinhua Du
Lan Du
Nan Duan
Ewan Dunbar
Long Duong
Nadir Durrani
Greg Durrett
Ondřej Dušek
Marc Dymetman
Seth Ebner†
Richard Eckart de Castilho
Judith Eckle-Kohler
Steffen Eger
Markus Egg
Koji Eguchi
Patrick Ehlen
Vladimir Eidelman
Andreas Eisele
Asif Ekbal
Layla El Asri
Roxanne El Baff†
Ahmed El Kholy
Shady Elbassuoni
Michael Elhadad
Mahmoud El-Haj
Hady Elsahar†
Tamer Elsayed
Micha Elsner
Akiko Eriguchi
Katrin Erk
Arash Eshghi
Ramy Eskander
Maxine Eskenazi
Keelan Evanini
Roger Evans
David Fagnan†
James Fan
Lisa Fan
Hao Fang
Stefano Faralli
Richárd Farkas
Noura Farra*
Manaal Faruqui
Nicolas R Fauceglia
Marcello Federico
Christian Federmann
Wes Feely†
Anna Feldman
Minwei Feng
Yansong Feng
Elisa Ferracane†
Francis Ferraro
Olivier Ferret
Oliver Ferschke
Simone Filice
Denis Filimonov
Katja Filippova
Andrew Finch

Gregory Finley
Nicholas FitzGerald
Eileen Fitzpatrick
Jeffrey Flanigan
Lucie Flekova
Michael Flor*
Radu Florian*
José A. R. Fonollosa
Mikel L. Forcada
George Foster
James Foulds
Anette Frank
Diego Frassinelli
Jesse Freitas
Lea Frermann
Annemarie Friedrich
Guohong Fu
Xiao Fu
Atsushi Fujii
Akinori Fujino
Atsushi Fujita
Sanae Fujita
Fumiyo Fukumoto
Richard Futrell
Robert Gaizauskas
Byron Galbraith
Michel Galley
Björn Gambäck
Michael Gamon
Kuzman Ganchev
Ashwinkumar Ganesan†
Debasis Ganguly
Yuze Gao†
Jesús Miguel García†
Marcos Garcia
Miguel A. García-Cumbreras
Claire Gardent
Matt Gardner
Dan Garrette
Guillermo Garrido
Justin Garten*
Milica Gašić
Tao Ge*
Kallirroi Georgila
Abbas Ghaddar†
Debanjan Ghosh*
Kevin Gimpel
Filip Ginter
Roxana Girju
James Glass
Michael Glass
Alfio Gliozzo†
Koldo Gojenola
Yoav Goldberg
Dan Goldwasser
Carlos Gómez-Rodríguez
Hugo Gonçalo Oliveira*
Hila Gonen
Samuel González-López
Kyle Gorman
Genevieve Gorrell
Isao Goto
Amit Goyal
Kartik Goyal
Pawan Goyal
Vishal Goyal
Thomas Graf
Yvette Graham
Floriana Grasso
Christophe Gravier
Nancy Green
Spence Green
Stephan Greene
Gregory Grefenstette
Eleni Gregoromichelaki
Ralph Grishman
Stig-Arne Grönroos†
Cyril Grouin
Jiatao Gu*
Anupam Guha
Curry Guinn
Hongyu Guo
Jiang Guo
Weiwei Guo
Xiaoxiao Guo
Yufan Guo
Nitish Gupta
Sonal Gupta
Suchin Gururangan†
Joakim Gustafson
Francisco Guzmán
Nizar Habash
Yaakov HaCohen-Kerner
Barry Haddow
Christian Hadiwinoto†
Matthias Hagen
Udo Hahn
Hannaneh Hajishirzi
Hazem Hajj
Kishaloy Halder
John Hale
David Hall
Keith Hall*
Michael Hammond
Thierry Hamon
Xianpei Han*
Mark Hansen
Jiangang Hao
Sanda Harabagiu
Christian Hardmeier
Sadid A. Hasan
Mohammed Hasanuzzaman
Mark Hasegawa-Johnson
Kazuma Hashimoto†
Eva Hasler
Hany Hassan
Helen Hastie
Bradley Hauer†
Catherine Havasi
Hangfeng He†
Hua He
Lihong He†
Wei He
Yifan He
Zhongjun He
Kenneth Heafield
Peter Heeman
Michael Heilman
Benjamin Heinzerling*
James Henderson
John Henderson
Matthew Henderson
James Hendler
Iris Hendrickx
Aurélie Herbelot
Ulf Hermjakob
Teresa Herrmann
Jonathan Herzig
Jack Hessel
Chris Hidey†
Felix Hieber
Ryuichiro Higashinaka
Derrick Higgins
Tsutomu Hirao
Keikichi Hirose
Graeme Hirst
Chris Hokamp†
Eric Holgate†
Nils Holzenberger†
Yu Hong
Enamul Hoque
Chiori Hori
Takaaki Hori

Veronique Hoste
Yufang Hou
Julian Hough
Dirk Hovy
Christine Howes
Shu-Kai Hsieh
Chun-Nan Hsu
Wen-Lian Hsu
Zhiting Hu
Xinyu Hua
Hen-Hsen Huang
Minlie Huang
Po-Sen Huang
Ruihong Huang
Shujian Huang
Xiaojiang Huang
Xiaolei Huang†
Xuanjing Huang
Zhongqiang Huang
Matthias Huck
Matt Huenerfauth
Mans Hulden
Rebecca Hwa
Mei-Yuh Hwang
Seung-won Hwang
Irina Illina†
Kenji Imamura
Kentaro Inui
Hitoshi Isahara
Alexei V. Ivanov
Mohit Iyyer
Sharmistha Jat†
Donghong JI
Yangfeng Ji
Di Jiang
Hui Jiang
Ridong Jiang
Xin Jiang
Charles Jochim†
Anders Johannsen
Richard Johansson
Michael Johnston
Kristiina Jokinen
Gareth Jones
Aditya Joshi
Mahesh Joshi
Shafiq Joty
Armand Joulin
Marcin Junczys-Dowmunt
David Jurgens
Kyo Kageura
Nobuhiro Kaji
Rasoul Kaljahi*
Hidetaka Kamigaito†
Hetunandan Kamisetty
Min-Yen Kan
Masahiro Kaneko†
Katharina Kann
Pinar Karagoz
Dimitri Kartsaklis
Lauri Karttunen
David Kauchak
Anna Kazantseva
Arefeh Kazemi
Mark Keane
Chris Kedzie
Andrew Kehler
Simon Keizer
John Kelleher
Ruth Kempson
Casey Kennington
Kian Kenyon-Dean
Kristian Kersting
Shahram Khadivi
Mitesh M. Khapra
Daniel Khashabi
Tushar Khot
Emre Kiciman
Douwe Kiela
Gunhee Kim
Jin-Dong Kim
Joo-Kyung Kim†
Jung-Jae Kim
Young-Bum Kim
Tracy Holloway King
Brian Kingsbury
Katrin Kirchhoff
Svetlana Kiritchenko
Julia Kiseleva
Dietrich Klakow
Guillaume Klein†
Jan Kleindienst
Alexandre Klementiev
Julien Kloetzer
Kevin Knight
Alistair Knott
Hayato Kobayashi
Philipp Koehn*
Rob Koeling
Jean-Pierre Koenig
Arne Köhn†
Varada Kolhatkar
Thomas Kollar
Alexander Koller
Mamoru Komachi
Kazunori Komatani
Alexandros Komninos†
Rik Koncel-Kedziorski
Grzegorz Kondrak
Lingpeng Kong
Ioannis Konstas
Mikhail Kopotev
Stefan Kopp
Valia Kordoni
Yannis Korkontzelos
Leila Kosseim
Katsunori Kotani
Mikhail Kozhevnikov
Emiel Krahmer
Martin Krallinger
Jayant Krishnamurthy
Vincent Kríž
Canasai Kruengkrai
Udo Kruschwitz
Germán Kruszewski
Lun-Wei Ku
Marco Kuhlmann
Roland Kuhn
Wu Kui†
Vivek Kulkarni
Shankar Kumar
Vaibhav Kumar
Jonathan Kummerfeld*
Gourab Kundu
Mikko Kurimo
Sadao Kurohashi
Robin Kurtz†
Mucahid Kutlu†
Tom Kwiatkowski
Oi Yee Kwong
Shibamouli Lahiri
Alice Lai
Wai Lam
Mathias Lambert
Patrik Lambert
Vasileios Lampos
Phillippe Langlais
Ni Lao
Guy Lapalme
Mirella Lapata
Shalom Lappin
Staffan Larsson
Jey Han Lau

Alberto Lavelli
Julia Lavid-López
Joseph Le Roux
Claudia Leacock
Chong Min Lee
Honglak Lee
Jihwan Lee†
John Lee
Kenton Lee
Moontae Lee
Sungjin Lee
Taesung Lee
Yoong Keok Lee
Young-Suk Lee
Fabrice Lefevre
Tao Lei
Alessandro Lenci
Chee Wee (Ben) Leong
Yves Lepage
James Lester
Johannes Leveling
Tomer Levinboim
Rivka Levitan
Sarah Ita Levitan
Gina-Anne Levow
Omer Levy
Mike Lewis
Binyang Li
Bofang Li†
Chen Li
Fangtao Li
Haizhou Li
Junhui Li
Lihong Li
Mu Li
Peifeng Li
Peng Li
Sheng Li
Sujian Li
Wenjie Li
Xiang Li*
Xiaoli Li
Xiaoqing Li†
Xiujun Li
Yanran Li
Yingyu Liang†
Constantine Lignos
Chu-Cheng Lin
Jimmy Lin
Junyang Lin†
Xiao Ling
Pierre Lison
Marina Litvak
Bing Liu*
Bing Liu
Can Liu
Changsong Liu
Jing Liu†
Kang Liu
Lemao Liu
Qi Liu†
Qun Liu
Shujie Liu
Ting Liu
Xiaodong Liu
Xueqing Liu†
Yang Liu
Karen Livescu
Elena Lloret*
Lajanugen Logeswaran†
Nikhil Londhe
José Lopes*
Oier Lopez de Lacalle
Adrian Pastor López Monroy
Aurelio López López
Anastassia Loukina
Di Lu*
Qin Lu
Wei Lu
Yi Luan
Nichola Lubold†
Michal Lukasik
Stephanie Lukin
Rebecca Lunsford
Weihua Luo
Minh-Thang Luong
Veronica Lynn†
Ji Ma
Mingbo Ma
Wei-Yun Ma
Xuezhe Ma
Andrew Maas
Brian Mac Namee
Klaus Macherey
Wolfgang Macherey
Nitin Madnani
Bernardo Magnini
Debanjan Mahata
Wolfgang Maier
Adam Makarucha
Nikolaos Malandrakis*
Andreas Maletti
Igor Malioutov
Fragkiskos Malliaros
Rob Malouf
Liliana Mamani Sanchez
Suresh Manandhar
Inderjeet Mani
Christopher D. Manning
Saab Mansour
Ramesh Manuvinakurike
Junhua Mao
Mitchell Marcus
Anna Margolis
Benjamin Marie
Erwin Marsi
David Martinez
Héctor Martínez Alonso*
André F. T. Martins
Bruno Martins
David Martins de Matos
Yuval Marton
Luis Marujo
Shigeki Matsubara
Yoichi Matsuyama
Yevgen Matusevych
Chandler May†
James Mayfield
Karen Mazidi
David McAllester
Andrew McCallum
Diana McCarthy
David McClosky
Bridget McInnes
Kathy McKeown
Brian McMahan
Louise McNally
Paul McNamee
Michael McTear
Julie Medero
Philipp Meerkamp
Oren Melamud
Gábor Melis
Arul Menezes
Fandong Meng
Helen Meng
Wolfgang Menzel
Angeliki Metallinou
Haitao Mi
Lisa Michaud
Stuart Middleton
Juliana Miehle†
Tomas Mikolov

Timothy Miller
Shachar Mirkin
Anand Mishra†
Teruko Mitamura
Jeff Mitchell*†
Prasenjit Mitra
Makoto Miwa
Daichi Mochihashi
Marie-Francine Moens
Abdelrahman Mohamed
Saif Mohammad*
Abidalrahman Moh'd
Behrang Mohit
Karo Moilanen
Diego Molla
Simonetta Montemagni
Andres Montoyo
Taesun Moon
Nafise Sadat Moosavi
Roser Morante
Véronique Moriceau
Emmanuel Morin
Hajime Morita
Alessandro Moschitti
Nasrin Mostafazadeh
Lili Mou
Danielle L Mowery
Matthew Mulholland*
Philippe Muller
Dragos Munteanu
Yugo Murawaki
Elena Musi
Seung-Hoon Na†
Seema Nagar
Masaaki Nagata
Ajay Nagesh
Saeed Najafi†
Satoshi Nakamura
Mikio Nakano
Yukiko Nakano
Ndapa Nakashole
Courtney Napoles
Jason Naradowsky
Karthik Narasimhan
Shrikanth Narayanan
Alexis Nasr
Vivi Nastase*
Roberto Navigli
Hamada Nayel
Claire Nédellec
Mark-Jan Nederhof
Arvind Neelakantan
Matteo Negri
Guenter Neumann
Dominick Ng
Hwee Tou Ng
Jun-Ping Ng
Vincent Ng
Axel-Cyrille Ngonga Ngomo
Dat Quoc Nguyen
Dong Nguyen*
Thien Huu Nguyen*
Viet-An Nguyen
Jian Ni
Garrett Nicolai
Massimo Nicosia
Vlad Niculae
Jian-Yun Nie
Jan Niehues
Rodney Nielsen
Takashi Ninomiya
Nobal Bikram Niraula
Hitoshi Nishikawa
Zheng-Yu Niu
Joakim Nivre
Chikashi Nobata
Hiroshi Noji
Pierre Nugues
Diarmuid Ó Séaghdha
Mick O'Donnell
Brendan O'Connor
Timothy O'Donnell
Stephan Oepen
Nir Ofek
Kemal Oflazer
Alice Oh
Jong-Hoon Oh
Kiyonori Ohtake
Naoaki Okazaki
Manabu Okumura
Hiroshi G. Okuno
Eda Okur†
Shereen Oraby*
Naoki Otani
Myle Ott
Jessica Ouyang†
Cecilia Ovesdotter Alm
Lilja Øvrelid
Gözde Özbal†
Ankur Padia†
Ulrike Pado
Sebastian Padó
Alexis Palmer
Alessio Palmero Aprosio
Sinno Jialin Pan
Alexander Panchenko†
Patrick Pantel
Aasish Pappu
Ivandré Paraboni
Ankur Parikh
Sunghyun Park†
Rebecca J. Passonneau
Siddharth Patwardhan
Michael J. Paul
Umashanthi Pavalanathan
Adam Pease
Pavel Pecina
Stephan Peitz
Jing Peng†
Xiaochang Peng
Gerald Penn
Alicia Pérez†
Laura Perez-Beltrachini
Verónica Pérez-Rosas
Bryan Perozzi
Matthew Peters
Slav Petrov
Volha Petukhova
Nghia The Pham
Maria Pia di Buono†
Scott Piao
Olivier Pietquin
Mohammad Taher Pilehvar
Yuval Pinter
Tommi Pirinen
Nikiforos Pittaras
Paul Piwek
Benjamin Piwowarski
Lahari Poddar†
Christian Pölitz
Massimo Poesio
Thierry Poibeau
Adam Poliak†
Heather Pon-Barry
Simone Paolo Ponzetto
Hoifung Poon
Ana-Maria Popescu
Marius Popescu
Andrei Popescu-Belis
Maja Popović
Fred Popowich
Rebecca Portnoff
Christopher Potts

Vinodkumar Prabhakaran*
Animesh Prasad
Adithya Pratapa†
Daniel Preoţiuc-Pietro
Patti Price
Emily Prud'hommeaux
Matthew Purver
Ashequl Qadir
Behrang QasemiZadeh
Tao Qin
Long Qiu
Minghui Qiu
Xipeng Qiu
Preethi Raghavan
Altaf Rahman
Rohan Ramanath
Carlos Ramisch
Nitin Ramrakhiyani†
Vivek Kumar Rangarajan Sridhar
Peter A. Rankel
Jinfeng Rao
Sudha Rao
Ari Rappoport
Mohammad Sadegh Rasooli
Antoine Raux
Sujith Ravi*
Kyle Rawlins
Manny Rayner
Paul Rayson
Marta Recasens
Siva Reddy
Sravana Reddy
Marek Rei
Ehud Reiter
David Reitter
Steve Renals
Ludovic Rheault
Giuseppe Riccardi
Matthew Richardson
Mark Riedl
Martin Riedl
Jason Riesa
Arndt Riester
German Rigau
Mattia Rigotti
Laura Rimell
Fabio Rinaldi
Eric Ringger
Michael Rist†
Alan Ritter
Brian Roark
Kirk Roberts
Melissa Roemmele
Marcus Rohrbach
Lina M. Rojas Barahona
Oleg Rokhlenko
Stephen Roller
Laurent Romary
Salvatore Romeo†
Marc-Antoine Rondeau
Eric Rosen
Andrew Rosenberg
Sophie Rosset*
Paolo Rosso
Benjamin Roth
Michael Roth
Johann Roturier
Aku Rouhe†
Salim Roukos
Bryan Routledge
Andrew Roxburgh†
Alla Rozovskaya
Nicholas Ruiz
Anna Rumshisky
Josef Ruppenhofer
Alexander Rush
Irene Russo
Attapol Rutherford
Kugatsu Sadamitsu
Markus Saers
Kenji Sagae
Benoît Sagot
Saurav Sahay
Hassan Sajjad
Keisuke Sakaguchi
Peña Saldarriaga†
Avneesh Saluja
Rajhans Samdani
Magali Sanches Duran
Enrico Santus
Murat Saraclar
Ruhi Sarikaya
Anoop Sarkar
Yutaka Sasaki
Ryohei Sasano
Prasanna Sattigeri
Nikunj Saunshi†
Christina Sauper
Asad Sayeed
Christian Scheible
Frank Schilder
Michael Schlichtkrull†
Natalie Schluter*
Allen Schmaltz
Helmut Schmid
Andrew Schneider†
Jodi Schneider
Alexandra Schofield
William Schuler
Sabine Schulte im Walde
Hannes Schulz
H. Andrew Schwartz
Lane Schwartz
Roy Schwartz*
Stephanie Schwartz
Holger Schwenk
Donia Scott
Pascale Sébillot
Natalia Segal†
Satoshi Sekine
Jean Senellart
Rico Sennrich
Chandramohan Senthilkumar
Minjoon Seo
Izhak Shafran
Cui Shaobo†
Vasu Sharma†
Serge Sharoff
Lanbo She*
Baoxu Shi
Shuming Shi
Yangyang Shi
Hiroyuki Shindo
Chaitanya Shivade
Ekaterina Shutova
Maryam Siahbani
Advaith Siddharthan
Carina Silberer
Miikka Silfverberg†
Fabrizio Silvestri
Michel Simard
Patrick Simianer†
Kiril Simov
Serra Sinem Tekiroglu†
Abhishek Singh†
Sameer Singh
Kairit Sirts
Sunayana Sitaram
Steve Skiena
Kevin Small
Ronnie Smith
Jan Šnajder
Artem Sokolov

Youngseo Son†
Hyun-Je Song
Linfeng Song
Radu Soricut
Michael Spranger
Richard Sproat
Vivek Srikumar
Somayajulu Sripada
Manfred Stede
Pontus Stenetorp
Amanda Stent*
Mark Stevenson
Brandon Stewart
Matthew Stone
Svetlana Stoyanchev
Veselin Stoyanov*
Carlo Strapparava
Karl Stratos
Kristina Striegnitz
Jannik Strötgen
Sara Stymne
Jinsong Su
Keh-Yih Su*
Katsuhito Sudoh
Elior Sulem†
Ming Sun
Xu Sun
Peter Sutton
Hisami Suzuki
Jun Suzuki
Yoshimi Suzuki
John Sylak-Glassman
György Szarvas
Stan Szpakowicz
Oscar Täckström
Hiroya Takamura
David Talbot
Partha Talukdar
Akihiro Tamura
Chenhao Tan
Takaaki Tanaka
Niket Tandon
Duyu Tang
Xavier Tannier
Yuka Tateisi
Rachael Tatman
Tatiane Tavares
Kapil Thadani
Mariët Theune
Paul Thompson
Sam Thomson
Christoph Tillmann
Ivan Titov
Erik Tjong Kim Sang
Takenobu Tokunaga
Marc Tomlinson
Sara Tonelli
Antonio Toral
Kentaro Torisawa
Marwan Torki
Samia Touileb
Trang Tran
David Traum
Adam Trischler†
Chen-Tse Tsai*
Richard Tzong-Han Tsai
Reut Tsarfaty
Ling Tsou†
Oren Tsur
Yoshimasa Tsuruoka
Yulia Tsvetkov
Zhaopeng Tu
Gökhan Tür*
Marco Turchi
Ferhan Ture
Martin Tutek†
Kiyotaka Uchimoto
Stefan Ultes
Lyle Ungar
Shyam Upadhyay
Masao Utiyama
Takehito Utsuro
Ozlem Uzuner
Naushad UzZaman
Raghuram Vadapalli
Alessandro Valitutti
Andreas van Cranenburgh
Rogier van Dalen
Tim Van de Cruys
Kees van Deemter
Lonneke van der Plas
Benjamin Van Durme
Emiel van Miltenburg
Rik van Noord†
Marten van Schijndel
Vincent Vandeghinste
David Vandyke
Vasudeva Varma
Sumithra Velupillai
Deepak Venugopal
Marc Verhagen
Yannick Versley
Karin Verspoor
Marc Vilain
David Vilar
David Vilares
Jesús Vilares
Martin Villalba
Veronika Vincze
Andreas Vlachos
Svitlana Volkova*
Clare Voss
Piek Vossen
Atro Voutilainen
Ivan Vulić
Yogarshi Vyas
V.G. Vinod Vydiswaran
Henning Wachsmuth
Joachim Wagner*
Byron Wallace
Matthew Walter
Xiaojun Wan
Baoxun Wang
Chang Wang
Chi Wang*
Jiang Wang
Jingjing Wang
Jinpeng Wang
Rui Wang
Tong Wang
Yanshan Wang
Yiou Wang
Yue Wang†
Zhiguo Wang
Zhongqing Wang
Leo Wanner
Nigel Ward
Shinji Watanabe
Taro Watanabe*
Christopher Waterson*
Bonnie Webber
Wouter Weerkamp
David Weir
Michael Wiegand
Rodrigo Wilkens*
Theresa Wilson
Shuly Wintner
Sam Wiseman
Guillaume Wisniewski
Travis Wolfe
Lawrence Wolf-Sonkin†
Kam-Fai Wong
Hua Wu

Jian Wu
Joern Wuebker†
Min Xiao
Shasha Xie
Wenduan Xu
Nianwen Xue
Adam Yala
Ikuya Yamada
Bishan Yang
Diyi Yang
Min Yang
Qian Yang
Yaqin Yang
Yi Yang
Yinfei Yang†
Roman Yangarber
Tae Yano
Jin-ge Yao
Mark Yatskar*
James Yifei Yang†
Wenpeng Yin*
Ding Ying
Dani Yogatama
Su-Youn Yoon
Naoki Yoshinaga
Dian Yu
Dianhai Yu
Jianfei Yu
Liang-Chih Yu
Mo Yu
François Yvon
Nasser Zalmout†
Roberto Zamparelli
Fabio Massimo Zanzotto
Klaus Zechner
Luke Zettlemoyer
Deniz Zeyrek
Feifei Zhai
Biao Zhang†
Boliang Zhang*
Dakun Zhang†
Hao Zhang
Jiajun Zhang
Jianwen Zhang
Lei Zhang
Longtu Zhang†
Meishan Zhang
Min Zhang
Qi Zhang
Sheng Zhang†
Tong Zhang
Wei Zhang
Wei Zhang
Yongfeng Zhang
Yue Zhang
Dongyan Zhao
Hai Zhao
Jun Zhao
Ran Zhao
Tiejun Zhao
Xiaoqing Zheng
Zilong Zheng†
Alisa Zhila
Dong Zhou
Jie Zhou
Junsheng Zhou
Nina Zhou
Xuanyu Zhou†
Muhua Zhu
Xiaodan Zhu
Andrea Zielinski
Heike Zinsmeister
Imed Zitouni
Michael Zock
Chengqing Zong
Bowei Zou
Arkaitz Zubiaga*
Ingrid Zukerman

Outstanding Paper Award Committee

Joyce Chai
Michael Collins
Jennifer Foster
Smaranda Muresan
Joel Tetreault (Chair)

Test-of-Time Paper Expert Award Committee

Marilyn Walker (Chair)
Antal van den Bosch
Chris Callison-Burch
Claire Cardie
Joyce Chai
Walter Daelemans
Katrin Erk
Pascale Fung
Iryna Gurevych
Katrin Kirchhoff
Yuji Matsumoto
Yusuke Miyao
Alessandro Moschitti
Massimo Poesio
Owen Rambow
Anoop Sarkar
Amanda Stent
Michael Strube
Lucy Vanderwende
Hua Wu
Chengqing Zong

Student Volunteers

Akhtar Shad
Amorim Evelin
Amplayo Reinald Kim
Basu Roy Chowdhury Somnath
Chatterjee Rajen
Chinnappa Dhivya
Choubey Prafulla
Cocos Anne
Dai Zeyu
Ezeani Ignatius
Fu Yao
Gella Spandana
Goo Chih-Wen
Gu Jiatao
Hao Shudong
Jiang Chao
Jiang Jyun-Yu
Jiang Youxuan
Juraska Juraj
Keith Katherine
Kenyon-Dean Kian
Kriz Reno
Kumar Vishwajeet
Maharjan Suraj
Mokhtari Shekoofeh
Nangia Nikita
Paula Felipe
Poddar Shivani
Rahgooy Taher
Schneider Andrew
Shen Yanyao
Srivastava Shashank
Strubell Emma
Su Shang-Yu
Szubert Ida
Tran Trang
Vempala Alakananda
Wiegreffe Sarah
Xiao Liqiang
Yasunaga Michihiro
Ye Hai
Yu Tao
Zhao Jieyu

Outstanding Papers

For NAACL HLT 2018 we recognize four outstanding research track papers (one of these will be named best paper). These four papers were selected by a committee composed of Joyce Chai (Michigan State University), Michael Collins (Columbia University), Jennifer Foster (Dublin City University), Smaranda Muresan (Columbia University) and Joel Tetreault (Grammarly; chair), all NAACL HLT 2018 area chairs with no conflicts with the candidate outstanding papers. The nine candidate papers were selected by the program chairs from nineteen papers nominated by the area chairs. These papers will be presented in a plenary session on the last day of the conference. Congratulations to the authors!

- *Deep Contextualized Word Representations*, by Matthew Peters, Mark Neumann, Mohit Iyyer, Matt Gardner, Christopher Clark, Kenton Lee and Luke Zettlemoyer
- *Learning to Map Context-Dependent Sentences to Executable Formal Queries*, by Alane Suhr, Srinivasan Iyer and Yoav Artzi
- *Neural Text Generation in Stories using Entity Representations as Context*, by Elizabeth Clark, Yangfeng Ji and Noah A. Smith
- *Recurrent Neural Networks as Weighted Language Recognizers*, by Yining Chen, Sorcha Gilroy, Andreas Maletti, Jonathan May and Kevin Knight

Test of Time Papers

For NAACL HLT 2018 we recognize three influential and inspiring Computational Linguistics (CL) papers which were published between 2002-2012 at the Association for Computational Linguistics (ACL) conferences (including ACL, NAACL, EACL, EMNLP and CONLL), workshops and journals (including TACL and CL), to recognize research that has had long-lasting influence until today, including positive impact on a subarea of CL, across subareas of CL, and outside of the CL research community. These papers may have proposed new research directions and new technologies, or released results and resources that have greatly benefit the community. Nineteen candidate test of time papers were nominated by our area chairs. Separate votes on these papers were held separately by two committees: an expert award committee consisting of all ACL and NAACL general chairs and program chairs and NAACL board members from 2013-2018 who did not have a conflict with the nominated papers, and a community award committee consisting of the 1000 authors who have published the most papers at ACL venues and who did not have a conflict with the nominated papers. These papers will be re-presented by the authors in a plenary session on the second day of the conference. Congratulations to the authors!

- *BLEU: a Method for Automatic Evaluation of Machine Translation*, by Kishore Papineni, Salim Roukos, Todd Ward and Wei-Jing Zhu
- *Discriminative Training Methods for Hidden Markov Models: Theory and Experiments with Perceptron Algorithms*, by Michael Collins
- *Thumbs up?: Sentiment Classification using Machine Learning Techniques*, by Bo Pang, Lillian Lee and Shivakumar Vaithyanathan

Keynote Talk: Why 72?

Charles Yang
University of Pennsylvania

Biography
Charles is a Professor of Linguistics, Computer Science, and Psychology at the University of Pennsylvania and directs the Program in Cognitive Science. He has spent a long time to work out the tricks children use to learn languages and is now ready to try them out on machines. His most recent book, The Price of Linguistic Productivity, is the winner of the 2017 LSA Leonard Bloomfield award.

Keynote Talk: The Moment When the Future Fell Asleep

Kevin Knight
University of Southern California / Information Sciences Institute

Biography
Kevin is a professor of computer science at the University of Southern California and fellow of the Information Sciences Institute. He is a 2014 fellow of the ACL for foundational contributions to machine translation, to the application of automata for NLP, to decipherment of historical manuscripts, to semantics and to generation.

Keynote Talk: Google Assistant or My Assistant? Towards Personalized Situated Conversational Agents

Dilek Hakkani-Tür
Google Research

Abstract
Interacting with machines in natural language has been a holy grail since the beginning of computers. Given the difficulty of understanding natural language, only in the past couple of decades, we started seeing real user applications for targeted/limited domains. More recently, advances in deep learning based approaches enabled exciting new research frontiers for end-to-end goal-oriented conversational systems. However, personalization (i.e., learning to take actions from users and learning about users beyond memorizing simple attributes) remains a research challenge. In this talk, I'll review end-to-end situated dialogue systems research, with components for situated language understanding, dialogue state tracking, policy, and language generation. The talk will highlight novel approaches where dialogue is viewed as a collaborative game between a user and an agent in the presence of visual information. The situated conversational agent can be bootstrapped using user simulation (crawl), improved through interactions with crowd-workers (walk), and iteratively refined with real user interactions (run).

Biography
Dilek is a research scientist at Google Research Dialogue Group and has previously held positions at Microsoft Research, ICSI, and AT&T Labs – Research. She is a fellow of the IEEE and of ISCA. Her research interests include conversational AI, natural language and speech processing, spoken dialogue systems, and machine learning for language processing.

Table of Contents

Enhanced Word Representations for Bridging Anaphora Resolution
Yufang Hou 1

Gender Bias in Coreference Resolution
Rachel Rudinger, Jason Naradowsky, Brian Leonard and Benjamin Van Durme 8

Gender Bias in Coreference Resolution: Evaluation and Debiasing Methods
Jieyu Zhao, Tianlu Wang, Mark Yatskar, Vicente Ordonez and Kai-Wei Chang 15

Integrating Stance Detection and Fact Checking in a Unified Corpus
Ramy Baly, Mitra Mohtarami, James Glass, Lluís Màrquez, Alessandro Moschitti and Preslav Nakov 21

Is Something Better than Nothing? Automatically Predicting Stance-based Arguments Using Deep Learning and Small Labelled Dataset
Pavithra Rajendran, Danushka Bollegala and Simon Parsons 28

Multi-Task Learning for Argumentation Mining in Low-Resource Settings
Claudia Schulz, Steffen Eger, Johannes Daxenberger, Tobias Kahse and Iryna Gurevych 35

Neural Models for Reasoning over Multiple Mentions Using Coreference
Bhuwan Dhingra, Qiao Jin, Zhilin Yang, William Cohen and Ruslan Salakhutdinov 42

Automatic Dialogue Generation with Expressed Emotions
Chenyang Huang, Osmar Zaiane, Amine Trabelsi and Nouha Dziri 49

Guiding Generation for Abstractive Text Summarization Based on Key Information Guide Network
Chenliang Li, Weiran Xu, Si Li and Sheng Gao 55

Natural Language Generation by Hierarchical Decoding with Linguistic Patterns
Shang-Yu Su, Kai-Ling Lo, Yi Ting Yeh and Yun-Nung Chen 61

Neural Poetry Translation
Marjan Ghazvininejad, Yejin Choi and Kevin Knight 67

RankME: Reliable Human Ratings for Natural Language Generation
Jekaterina Novikova, Ondřej Dušek and Verena Rieser 72

Sentence Simplification with Memory-Augmented Neural Networks
Tu Vu, Baotian Hu, Tsendsuren Munkhdalai and Hong Yu 79

A Corpus of Non-Native Written English Annotated for Metaphor
Beata Beigman Klebanov, Chee Wee (Ben) Leong and Michael Flor 86

A Simple and Effective Approach to the Story Cloze Test
Siddarth Srinivasan, Richa Arora and Mark Riedl 92

An Annotated Corpus for Machine Reading of Instructions in Wet Lab Protocols
Chaitanya Kulkarni, Wei Xu, Alan Ritter and Raghu Machiraju 97

Annotation Artifacts in Natural Language Inference Data
Suchin Gururangan, Swabha Swayamdipta, Omer Levy, Roy Schwartz, Samuel Bowman and Noah A. Smith 107

Humor Recognition Using Deep Learning
Peng-Yu Chen and Von-Wun Soo 113

Leveraging Intra-User and Inter-User Representation Learning for Automated Hate Speech Detection
Jing Qian, Mai ElSherief, Elizabeth Belding and William Yang Wang 118

Reference-less Measure of Faithfulness for Grammatical Error Correction
Leshem Choshen and Omri Abend 124

Training Structured Prediction Energy Networks with Indirect Supervision
Amirmohammad Rooshenas, Aishwarya Kamath and Andrew McCallum 130

Si O No, Que Penses? Catalonian Independence and Linguistic Identity on Social Media
Ian Stewart, Yuval Pinter and Jacob Eisenstein 136

A Transition-Based Algorithm for Unrestricted AMR Parsing
David Vilares and Carlos Gómez-Rodríguez 142

Analogies in Complex Verb Meaning Shifts: the Effect of Affect in Semantic Similarity Models
Maximilian Köper and Sabine Schulte im Walde 150

Character-Based Neural Networks for Sentence Pair Modeling
Wuwei Lan and Wei Xu 157

Determining Event Durations: Models and Error Analysis
Alakananda Vempala, Eduardo Blanco and Alexis Palmer 164

Diachronic Usage Relatedness (DURel): A Framework for the Annotation of Lexical Semantic Change
Dominik Schlechtweg, Sabine Schulte im Walde and Stefanie Eckmann 169

Directional Skip-Gram: Explicitly Distinguishing Left and Right Context for Word Embeddings
Yan Song, Shuming Shi, Jing Li and Haisong Zhang 175

Discriminating between Lexico-Semantic Relations with the Specialization Tensor Model
Goran Glavaš and Ivan Vulić 181

Evaluating bilingual word embeddings on the long tail
Fabienne Braune, Viktor Hangya, Tobias Eder and Alexander Fraser 188

Frustratingly Easy Meta-Embedding – Computing Meta-Embeddings by Averaging Source Word Embeddings
Joshua Coates and Danushka Bollegala 194

Introducing Two Vietnamese Datasets for Evaluating Semantic Models of (Dis-)Similarity and Relatedness
Kim Anh Nguyen, Sabine Schulte im Walde and Ngoc Thang Vu 199

Lexical Substitution for Evaluating Compositional Distributional Models
Maja Buljan, Sebastian Padó and Jan Šnajder 206

Mittens: an Extension of GloVe for Learning Domain-Specialized Representations
Nicholas Dingwall and Christopher Potts 212

Olive Oil is Made of *Olives, Baby Oil is Made* for *Babies: Interpreting Noun Compounds Using Paraphrases in a Neural Model*
Vered Shwartz and Chris Waterson 218

Semantic Pleonasm Detection
Omid Kashefi, Andrew T. Lucas and Rebecca Hwa 225

Similarity Measures for the Detection of Clinical Conditions with Verbal Fluency Tasks
Felipe Paula, Rodrigo Wilkens, Marco Idiart and Aline Villavicencio 231

Sluice Resolution without Hand-Crafted Features over Brittle Syntax Trees
Ola Rønning, Daniel Hardt and Anders Søgaard 236

The Word Analogy Testing Caveat
Natalie Schluter 242

Transition-Based Chinese AMR Parsing
Chuan Wang, Bin Li and Nianwen Xue 247

Knowledge-Enriched Two-Layered Attention Network for Sentiment Analysis
Abhishek Kumar, Daisuke Kawahara and Sadao Kurohashi 253

Letting Emotions Flow: Success Prediction by Modeling the Flow of Emotions in Books
Suraj Maharjan, Sudipta Kar, Manuel Montes, Fabio A. Gonzalez and Thamar Solorio 259

Modeling Inter-Aspect Dependencies for Aspect-Based Sentiment Analysis
Devamanyu Hazarika, Soujanya Poria, Prateek Vij, Gangeshwar Krishnamurthy, Erik Cambria and Roger Zimmermann 266

Multi-Task Learning Framework for Mining Crowd Intelligence towards Clinical Treatment
Shweta Yadav, Asif Ekbal, Sriparna Saha, Pushpak Bhattacharyya and Amit Sheth 271

Recurrent Entity Networks with Delayed Memory Update for Targeted Aspect-Based Sentiment Analysis
Fei Liu, Trevor Cohn and Timothy Baldwin 278

Near Human-Level Performance in Grammatical Error Correction with Hybrid Machine Translation
Roman Grundkiewicz and Marcin Junczys-Dowmunt 284

Strong Baselines for Simple Question Answering over Knowledge Graphs with and without Neural Networks
Salman Mohammed, Peng Shi and Jimmy Lin 291

Looking for Structure in Lexical and Acoustic-Prosodic Entrainment Behaviors
Andreas Weise and Rivka Levitan 297

Modeling Semantic Plausibility by Injecting World Knowledge
Su Wang, Greg Durrett and Katrin Erk 303

A Bi-Model Based RNN Semantic Frame Parsing Model for Intent Detection and Slot Filling
Yu Wang, Yilin Shen and Hongxia Jin 309

A Comparison of Two Paraphrase Models for Taxonomy Augmentation
Vassilis Plachouras, Fabio Petroni, Timothy Nugent and Jochen L. Leidner 315

A Laypeople Study on Terminology Identification across Domains and Task Definitions
Anna Hätty and Sabine Schulte im Walde 321

A Novel Embedding Model for Knowledge Base Completion Based on Convolutional Neural Network
Dai Quoc Nguyen, Tu Dinh Nguyen, Dat Quoc Nguyen and Dinh Phung 327

Cross-language Article Linking Using Cross-Encyclopedia Entity Embedding
Chun-Kai Wu and Richard Tzong-Han Tsai 334

Identifying the Most Dominant Event in a News Article by Mining Event Coreference Relations
Prafulla Kumar Choubey, Kaushik Raju and Ruihong Huang 340

Improve Neural Entity Recognition via Multi-Task Data Selection and Constrained Decoding
Huasha Zhao, Yi Yang, Qiong Zhang and Luo Si 346

Keep Your Bearings: Lightly-Supervised Information Extraction with Ladder Networks That Avoids Semantic Drift
Ajay Nagesh and Mihai Surdeanu 352

Semi-Supervised Event Extraction with Paraphrase Clusters
James Ferguson, Colin Lockard, Daniel Weld and Hannaneh Hajishirzi 359

Structure Regularized Neural Network for Entity Relation Classification for Chinese Literature Text
Ji Wen, Xu Sun, Xuancheng Ren and Qi Su 365

Syntactic Patterns Improve Information Extraction for Medical Search
Roma Patel, Yinfei Yang, Iain Marshall, Ani Nenkova and Byron Wallace 371

Syntactically Aware Neural Architectures for Definition Extraction
Luis Espinosa Anke and Steven Schockaert 378

A Dynamic Oracle for Linear-Time 2-Planar Dependency Parsing
Daniel Fernández-González and Carlos Gómez-Rodríguez 386

Are Automatic Methods for Cognate Detection Good Enough for Phylogenetic Reconstruction in Historical Linguistics?
Taraka Rama, Johann-Mattis List, Johannes Wahle and Gerhard Jäger 393

Automatically Selecting the Best Dependency Annotation Design with Dynamic Oracles
Guillaume Wisniewski, Ophélie Lacroix and François Yvon 401

Consistent CCG Parsing over Multiple Sentences for Improved Logical Reasoning
Masashi Yoshikawa, Koji Mineshima, Hiroshi Noji and Daisuke Bekki 407

Exploiting Dynamic Oracles to Train Projective Dependency Parsers on Non-Projective Trees
Lauriane Aufrant, Guillaume Wisniewski and François Yvon 413

Improving Coverage and Runtime Complexity for Exact Inference in Non-Projective Transition-Based Dependency Parsers
Tianze Shi, Carlos Gómez-Rodríguez and Lillian Lee 420

Towards a Variability Measure for Multiword Expressions
Caroline Pasquer, Agata Savary, Jean-Yves Antoine and Carlos Ramisch 426

Defoiling Foiled Image Captions
Pranava Swaroop Madhyastha, Josiah Wang and Lucia Specia 433

Pragmatically Informative Image Captioning with Character-Level Inference
Reuben Cohn-Gordon, Noah Goodman and Christopher Potts 439

Object Ordering with Bidirectional Matchings for Visual Reasoning
Hao Tan and Mohit Bansal 444

Contextual Augmentation: Data Augmentation by Words with Paradigmatic Relations
Sosuke Kobayashi 452

Cross-Lingual Learning-to-Rank with Shared Representations
Shota Sasaki, Shuo Sun, Shigehiko Schamoni, Kevin Duh and Kentaro Inui 458

Self-Attention with Relative Position Representations
Peter Shaw, Jakob Uszkoreit and Ashish Vaswani 464

Text Segmentation as a Supervised Learning Task
Omri Koshorek, Adir Cohen, Noam Mor, Michael Rotman and Jonathan Berant 469

What's in a Domain? Learning Domain-Robust Text Representations using Adversarial Training
Yitong Li, Timothy Baldwin and Trevor Cohn 474

Automated Paraphrase Lattice Creation for HyTER Machine Translation Evaluation
Marianna Apidianaki, Guillaume Wisniewski, Anne Cocos and Chris Callison-Burch 480

Exploiting Semantics in Neural Machine Translation with Graph Convolutional Networks
Diego Marcheggiani, Joost Bastings and Ivan Titov 486

Incremental Decoding and Training Methods for Simultaneous Translation in Neural Machine Translation
Fahim Dalvi, Nadir Durrani, Hassan Sajjad and Stephan Vogel 493

Learning Hidden Unit Contribution for Adapting Neural Machine Translation Models
David Vilar 500

Neural Machine Translation Decoding with Terminology Constraints
Eva Hasler, Adrià de Gispert, Gonzalo Iglesias and Bill Byrne 506

On the Evaluation of Semantic Phenomena in Neural Machine Translation Using Natural Language Inference
Adam Poliak, Yonatan Belinkov, James Glass and Benjamin Van Durme 513

Using Word Vectors to Improve Word Alignments for Low Resource Machine Translation
Nima Pourdamghani, Marjan Ghazvininejad and Kevin Knight 524

When and Why Are Pre-Trained Word Embeddings Useful for Neural Machine Translation?
Ye Qi, Devendra Sachan, Matthieu Felix, Sarguna Padmanabhan and Graham Neubig 529

Are All Languages Equally Hard to Language-Model?
Ryan Cotterell, Sebastian J. Mielke, Jason Eisner and Brian Roark 536

The Computational Complexity of Distinctive Feature Minimization in Phonology
Hubie Chen and Mans Hulden 542

Unsupervised Disambiguation of Syncretism in Inflected Lexicons
Ryan Cotterell, Christo Kirov, Sebastian J. Mielke and Jason Eisner 548

Contextualized Word Representations for Reading Comprehension
Shimi Salant and Jonathan Berant 554

Crowdsourcing Question-Answer Meaning Representations
Julian Michael, Gabriel Stanovsky, Luheng He, Ido Dagan and Luke Zettlemoyer 560

Leveraging Context Information for Natural Question Generation
Linfeng Song, Zhiguo Wang, Wael Hamza, Yue Zhang and Daniel Gildea 569

Robust Machine Comprehension Models via Adversarial Training
Yicheng Wang and Mohit Bansal 575

Simple and Effective Semi-Supervised Question Answering
Bhuwan Dhingra, Danish Danish and Dheeraj Rajagopal 582

TypeSQL: Knowledge-Based Type-Aware Neural Text-to-SQL Generation
Tao Yu, Zifan Li, Zilin Zhang, Rui Zhang and Dragomir Radev 588

Community Member Retrieval on Social Media Using Textual Information
Aaron Jaech, Shobhit Hathi and Mari Ostendorf 595

Cross-Domain Review Helpfulness Prediction Based on Convolutional Neural Networks with Auxiliary Domain Discriminators
Cen Chen, Yinfei Yang, Jun Zhou, Xiaolong Li and Forrest Sheng Bao 602

Predicting Foreign Language Usage from English-Only Social Media Posts
Svitlana Volkova, Stephen Ranshous and Lawrence Phillips 608

A Discourse-Aware Attention Model for Abstractive Summarization of Long Documents
Arman Cohan, Franck Dernoncourt, Doo Soon Kim, Trung Bui, Seokhwan Kim, Walter Chang and Nazli Goharian 615

A Mixed Hierarchical Attention Based Encoder-Decoder Approach for Standard Table Summarization
Parag Jain, Anirban Laha, Karthik Sankaranarayanan, Preksha Nema, Mitesh M. Khapra and Shreyas Shetty 622

Effective Crowdsourcing for a New Type of Summarization Task
Youxuan Jiang, Catherine Finegan-Dollak, Jonathan K. Kummerfeld and Walter Lasecki 628

Key2Vec: Automatic Ranked Keyphrase Extraction from Scientific Articles using Phrase Embeddings
Debanjan Mahata, John Kuriakose, Rajiv Ratn Shah and Roger Zimmermann 634

Learning to Generate Wikipedia Summaries for Underserved Languages from Wikidata
Lucie-Aimée Kaffee, Hady Elsahar, Pavlos Vougiouklis, Christophe Gravier, Frederique Laforest, Jonathon Hare and Elena Simperl 640

Multi-Reward Reinforced Summarization with Saliency and Entailment
Ramakanth Pasunuru and Mohit Bansal 646

Objective Function Learning to Match Human Judgements for Optimization-Based Summarization
Maxime Peyrard and Iryna Gurevych 654

Pruning Basic Elements for Better Automatic Evaluation of Summaries
Ukyo Honda, Tsutomu Hirao and Masaaki Nagata 661

Unsupervised Keyphrase Extraction with Multipartite Graphs
Florian Boudin 667

Where Have I Heard This Story Before? Identifying Narrative Similarity in Movie Remakes
Snigdha Chaturvedi, Shashank Srivastava and Dan Roth 673

Multimodal Emoji Prediction
Francesco Barbieri, Miguel Ballesteros, Francesco Ronzano and Horacio Saggion 679

Higher-Order Coreference Resolution with Coarse-to-Fine Inference
Kenton Lee, Luheng He and Luke Zettlemoyer 687

Non-Projective Dependency Parsing with Non-Local Transitions
Daniel Fernández-González and Carlos Gómez-Rodríguez 693

Detecting Linguistic Characteristics of Alzheimer's Dementia by Interpreting Neural Models
Sweta Karlekar, Tong Niu and Mohit Bansal 701

Deep Dungeons and Dragons: Learning Character-Action Interactions from Role-Playing Game Transcripts
Annie Louis and Charles Sutton 708

Feudal Reinforcement Learning for Dialogue Management in Large Domains
Iñigo Casanueva, Paweł Budzianowski, Pei-Hao Su, Stefan Ultes, Lina M. Rojas Barahona, Bo-Hsiang Tseng and Milica Gasic 714

Evaluating Historical Text Normalization Systems: How Well Do They Generalize?
Alexander Robertson and Sharon Goldwater 720

Gated Multi-Task Network for Text Classification
Liqiang Xiao, Honglun Zhang and Wenqing Chen 726

Natural Language to Structured Query Generation via Meta-Learning
Po-Sen Huang, Chenglong Wang, Rishabh Singh, Wen-tau Yih and Xiaodong He 732

Smaller Text Classifiers with Discriminative Cluster Embeddings
Mingda Chen and Kevin Gimpel 739

Role-specific Language Models for Processing Recorded Neuropsychological Exams
Tuka Al Hanai, Rhoda Au and James Glass 746

Slot-Gated Modeling for Joint Slot Filling and Intent Prediction
Chih-Wen Goo, Guang Gao, Yun-Kai Hsu, Chih-Li Huo, Tsung-Chieh Chen, Keng-Wei Hsu and Yun-Nung Chen 753

An Evaluation of Image-Based Verb Prediction Models against Human Eye-Tracking Data
Spandana Gella and Frank Keller 758

Learning to Color from Language
Varun Manjunatha, Mohit Iyyer, Jordan Boyd-Graber and Larry Davis 764

Punny Captions: Witty Wordplay in Image Descriptions
Arjun Chandrasekaran, Devi Parikh and Mohit Bansal 770

The Emergence of Semantics in Neural Network Representations of Visual Information
Dhanush Dharmaretnam and Alona Fyshe 776

Visual Referring Expression Recognition: What Do Systems Actually Learn?
Volkan Cirik, Louis-Philippe Morency and Taylor Berg-Kirkpatrick 781

Visually Guided Spatial Relation Extraction from Text
Taher Rahgooy, Umar Manzoor and Parisa Kordjamshidi 788

Watch, Listen, and Describe: Globally and Locally Aligned Cross-Modal Attentions for Video Captioning
Xin Wang, Yuan-Fang Wang and William Yang Wang 795

Conference Program

June 2

07:30–08:45 Breakfast

08:45–09:00 Welcome from the Chairs

09:00–10:00 Keynote (sponsored by Toutiao AI Lab)

Why 72?
Charles Yang, University of Pennsylvania

10:00–10:30 Morning Coffee

10:30–11:30 Information Extraction 1

10:30–11:30 Phonology, Morphology and Word Segmentation 1

10:30–11:30 Speech 1

10:30–12:00 Discourse and Pragmatics 1

Enhanced Word Representations for Bridging Anaphora Resolution
Yufang Hou

Gender Bias in Coreference Resolution
Rachel Rudinger, Jason Naradowsky, Brian Leonard and Benjamin Van Durme

Gender Bias in Coreference Resolution: Evaluation and Debiasing Methods
Jieyu Zhao, Tianlu Wang, Mark Yatskar, Vicente Ordonez and Kai-Wei Chang

Integrating Stance Detection and Fact Checking in a Unified Corpus
Ramy Baly, Mitra Mohtarami, James Glass, Lluís Màrquez, Alessandro Moschitti and Preslav Nakov

June 2 (continued)

Is Something Better than Nothing? Automatically Predicting Stance-based Arguments Using Deep Learning and Small Labelled Dataset
Pavithra Rajendran, Danushka Bollegala and Simon Parsons

Multi-Task Learning for Argumentation Mining in Low-Resource Settings
Claudia Schulz, Steffen Eger, Johannes Daxenberger, Tobias Kahse and Iryna Gurevych

Neural Models for Reasoning over Multiple Mentions Using Coreference
Bhuwan Dhingra, Qiao Jin, Zhilin Yang, William Cohen and Ruslan Salakhutdinov

10:30–12:00 Generation 1

Automatic Dialogue Generation with Expressed Emotions
Chenyang Huang, Osmar Zaiane, Amine Trabelsi and Nouha Dziri

Guiding Generation for Abstractive Text Summarization Based on Key Information Guide Network
Chenliang Li, Weiran Xu, Si Li and Sheng Gao

Natural Language Generation by Hierarchical Decoding with Linguistic Patterns
Shang-Yu Su, Kai-Ling Lo, Yi Ting Yeh and Yun-Nung Chen

Neural Poetry Translation
Marjan Ghazvininejad, Yejin Choi and Kevin Knight

RankME: Reliable Human Ratings for Natural Language Generation
Jekaterina Novikova, Ondřej Dušek and Verena Rieser

Sentence Simplification with Memory-Augmented Neural Networks
Tu Vu, Baotian Hu, Tsendsuren Munkhdalai and Hong Yu

June 2 (continued)

10:30–12:00 NLP Applications 1

A Corpus of Non-Native Written English Annotated for Metaphor
Beata Beigman Klebanov, Chee Wee (Ben) Leong and Michael Flor

A Simple and Effective Approach to the Story Cloze Test
Siddarth Srinivasan, Richa Arora and Mark Riedl

An Annotated Corpus for Machine Reading of Instructions in Wet Lab Protocols
Chaitanya Kulkarni, Wei Xu, Alan Ritter and Raghu Machiraju

Annotation Artifacts in Natural Language Inference Data
Suchin Gururangan, Swabha Swayamdipta, Omer Levy, Roy Schwartz, Samuel Bowman and Noah A. Smith

Humor Recognition Using Deep Learning
Peng-Yu Chen and Von-Wun Soo

Leveraging Intra-User and Inter-User Representation Learning for Automated Hate Speech Detection
Jing Qian, Mai ElSherief, Elizabeth Belding and William Yang Wang

Reference-less Measure of Faithfulness for Grammatical Error Correction
Leshem Choshen and Omri Abend

June 2 (continued)

11:30–12:30 Machine Learning 1

11:30–12:30 Information Extraction 2

11:30–12:30 Machine Translation 1

12:30–14:00 Lunch

14:00–15:00 Industry Track Keynote

15:00–15:30 Afternoon Coffee

15:30–17:00 Machine Learning 2

15:48–16:06 *Training Structured Prediction Energy Networks with Indirect Supervision*
Amirmohammad Rooshenas, Aishwarya Kamath and Andrew McCallum

15:30–17:00 Social Media and Computational Social Science 1

16:06–16:24 *Si O No, Que Penses? Catalonian Independence and Linguistic Identity on Social Media*
Ian Stewart, Yuval Pinter and Jacob Eisenstein

June 2 (continued)

15:30–17:00 Vision, Robotics and Other Grounding 1

15:30–17:00 Semantics 1

A Transition-Based Algorithm for Unrestricted AMR Parsing
David Vilares and Carlos Gómez-Rodríguez

Analogies in Complex Verb Meaning Shifts: the Effect of Affect in Semantic Similarity Models
Maximilian Köper and Sabine Schulte im Walde

Character-Based Neural Networks for Sentence Pair Modeling
Wuwei Lan and Wei Xu

Determining Event Durations: Models and Error Analysis
Alakananda Vempala, Eduardo Blanco and Alexis Palmer

Diachronic Usage Relatedness (DURel): A Framework for the Annotation of Lexical Semantic Change
Dominik Schlechtweg, Sabine Schulte im Walde and Stefanie Eckmann

Directional Skip-Gram: Explicitly Distinguishing Left and Right Context for Word Embeddings
Yan Song, Shuming Shi, Jing Li and Haisong Zhang

Discriminating between Lexico-Semantic Relations with the Specialization Tensor Model
Goran Glavaš and Ivan Vulić

Evaluating bilingual word embeddings on the long tail
Fabienne Braune, Viktor Hangya, Tobias Eder and Alexander Fraser

Frustratingly Easy Meta-Embedding – Computing Meta-Embeddings by Averaging Source Word Embeddings
Joshua Coates and Danushka Bollegala

Introducing Two Vietnamese Datasets for Evaluating Semantic Models of (Dis-)Similarity and Relatedness
Kim Anh Nguyen, Sabine Schulte im Walde and Ngoc Thang Vu

June 2 (continued)

Lexical Substitution for Evaluating Compositional Distributional Models
Maja Buljan, Sebastian Padó and Jan Šnajder

Mittens: an Extension of GloVe for Learning Domain-Specialized Representations
Nicholas Dingwall and Christopher Potts

Olive Oil is Made of *Olives, Baby Oil is Made* for *Babies: Interpreting Noun Compounds Using Paraphrases in a Neural Model*
Vered Shwartz and Chris Waterson

Semantic Pleonasm Detection
Omid Kashefi, Andrew T. Lucas and Rebecca Hwa

Similarity Measures for the Detection of Clinical Conditions with Verbal Fluency Tasks
Felipe Paula, Rodrigo Wilkens, Marco Idiart and Aline Villavicencio

Sluice Resolution without Hand-Crafted Features over Brittle Syntax Trees
Ola Rønning, Daniel Hardt and Anders Søgaard

The Word Analogy Testing Caveat
Natalie Schluter

Transition-Based Chinese AMR Parsing
Chuan Wang, Bin Li and Nianwen Xue

June 2 (continued)

15:30–17:00 Sentiment Analysis 1

Knowledge-Enriched Two-Layered Attention Network for Sentiment Analysis
Abhishek Kumar, Daisuke Kawahara and Sadao Kurohashi

Letting Emotions Flow: Success Prediction by Modeling the Flow of Emotions in Books
Suraj Maharjan, Sudipta Kar, Manuel Montes, Fabio A. Gonzalez and Thamar Solorio

Modeling Inter-Aspect Dependencies for Aspect-Based Sentiment Analysis
Devamanyu Hazarika, Soujanya Poria, Prateek Vij, Gangeshwar Krishnamurthy, Erik Cambria and Roger Zimmermann

Multi-Task Learning Framework for Mining Crowd Intelligence towards Clinical Treatment
Shweta Yadav, Asif Ekbal, Sriparna Saha, Pushpak Bhattacharyya and Amit Sheth

Recurrent Entity Networks with Delayed Memory Update for Targeted Aspect-Based Sentiment Analysis
Fei Liu, Trevor Cohn and Timothy Baldwin

17:00–18:30 NLP Applications 2

18:12–18:30 *Near Human-Level Performance in Grammatical Error Correction with Hybrid Machine Translation*
Roman Grundkiewicz and Marcin Junczys-Dowmunt

June 2 (continued)

17:00–18:30 Question Answering 1

17:54–18:12 *Strong Baselines for Simple Question Answering over Knowledge Graphs with and without Neural Networks*
Salman Mohammed, Peng Shi and Jimmy Lin

17:00–18:30 SRW Highlights

June 3

07:45–08:45 Breakfast

08:45–09:00 Announcements

09:00–10:00 Keynote 2 (sponsored by Google)

The Moment When the Future Fell Asleep
Kevin Knight, University of Southern California / Information Sciences Institute

10:00–10:30 Morning Coffee

10:30–11:30 Cognitive Modeling and Psycholinguistics 1

11:06–11:24 *Looking for Structure in Lexical and Acoustic-Prosodic Entrainment Behaviors*
Andreas Weise and Rivka Levitan

June 3 (continued)

10:30–11:30 Summarization 1

10:30–11:30 Semantics 2

10:48–11:06 *Modeling Semantic Plausibility by Injecting World Knowledge*
Su Wang, Greg Durrett and Katrin Erk

10:30–12:00 Information Extraction 3

A Bi-Model Based RNN Semantic Frame Parsing Model for Intent Detection and Slot Filling
Yu Wang, Yilin Shen and Hongxia Jin

A Comparison of Two Paraphrase Models for Taxonomy Augmentation
Vassilis Plachouras, Fabio Petroni, Timothy Nugent and Jochen L. Leidner

A Laypeople Study on Terminology Identification across Domains and Task Definitions
Anna Hätty and Sabine Schulte im Walde

A Novel Embedding Model for Knowledge Base Completion Based on Convolutional Neural Network
Dai Quoc Nguyen, Tu Dinh Nguyen, Dat Quoc Nguyen and Dinh Phung

Cross-language Article Linking Using Cross-Encyclopedia Entity Embedding
Chun-Kai Wu and Richard Tzong-Han Tsai

Identifying the Most Dominant Event in a News Article by Mining Event Coreference Relations
Prafulla Kumar Choubey, Kaushik Raju and Ruihong Huang

Improve Neural Entity Recognition via Multi-Task Data Selection and Constrained Decoding
Huasha Zhao, Yi Yang, Qiong Zhang and Luo Si

Keep Your Bearings: Lightly-Supervised Information Extraction with Ladder Networks That Avoids Semantic Drift
Ajay Nagesh and Mihai Surdeanu

June 3 (continued)

Semi-Supervised Event Extraction with Paraphrase Clusters
James Ferguson, Colin Lockard, Daniel Weld and Hannaneh Hajishirzi

Structure Regularized Neural Network for Entity Relation Classification for Chinese Literature Text
Ji Wen, Xu Sun, Xuancheng Ren and Qi Su

Syntactic Patterns Improve Information Extraction for Medical Search
Roma Patel, Yinfei Yang, Iain Marshall, Ani Nenkova and Byron Wallace

Syntactically Aware Neural Architectures for Definition Extraction
Luis Espinosa Anke and Steven Schockaert

10:30–12:00 Tagging, Chunking, Syntax and Parsing 1

A Dynamic Oracle for Linear-Time 2-Planar Dependency Parsing
Daniel Fernández-González and Carlos Gómez-Rodríguez

Are Automatic Methods for Cognate Detection Good Enough for Phylogenetic Reconstruction in Historical Linguistics?
Taraka Rama, Johann-Mattis List, Johannes Wahle and Gerhard Jäger

Automatically Selecting the Best Dependency Annotation Design with Dynamic Oracles
Guillaume Wisniewski, Ophélie Lacroix and François Yvon

Consistent CCG Parsing over Multiple Sentences for Improved Logical Reasoning
Masashi Yoshikawa, Koji Mineshima, Hiroshi Noji and Daisuke Bekki

Exploiting Dynamic Oracles to Train Projective Dependency Parsers on Non-Projective Trees
Lauriane Aufrant, Guillaume Wisniewski and François Yvon

Improving Coverage and Runtime Complexity for Exact Inference in Non-Projective Transition-Based Dependency Parsers
Tianze Shi, Carlos Gómez-Rodríguez and Lillian Lee

Towards a Variability Measure for Multiword Expressions
Caroline Pasquer, Agata Savary, Jean-Yves Antoine and Carlos Ramisch

June 3 (continued)

11:30–12:30 Machine Learning 3

11:30–12:30 Social Media and Computational Social Science 2

11:30–12:30 Vision, Robotics and Other Grounding 2

11:30–11:48 *Defoiling Foiled Image Captions*
Pranava Swaroop Madhyastha, Josiah Wang and Lucia Specia

11:48–12:06 *Pragmatically Informative Image Captioning with Character-Level Inference*
Reuben Cohn-Gordon, Noah Goodman and Christopher Potts

12:06–12:24 *Object Ordering with Bidirectional Matchings for Visual Reasoning*
Hao Tan and Mohit Bansal

12:30–14:00 Lunch

14:00–15:00 Industry Track Keynote

15:00–15:30 Afternoon Coffee

June 3 (continued)

15:30–17:00 Text Mining 1

15:30–17:00 Semantics 3

15:30–17:00 Tagging, Chunking, Syntax and Parsing 2

15:30–17:00 Machine Learning 4

Contextual Augmentation: Data Augmentation by Words with Paradigmatic Relations
Sosuke Kobayashi

Cross-Lingual Learning-to-Rank with Shared Representations
Shota Sasaki, Shuo Sun, Shigehiko Schamoni, Kevin Duh and Kentaro Inui

Self-Attention with Relative Position Representations
Peter Shaw, Jakob Uszkoreit and Ashish Vaswani

Text Segmentation as a Supervised Learning Task
Omri Koshorek, Adir Cohen, Noam Mor, Michael Rotman and Jonathan Berant

What's in a Domain? Learning Domain-Robust Text Representations using Adversarial Training
Yitong Li, Timothy Baldwin and Trevor Cohn

June 3 (continued)

15:30–17:00 Machine Translation 2

Automated Paraphrase Lattice Creation for HyTER Machine Translation Evaluation
Marianna Apidianaki, Guillaume Wisniewski, Anne Cocos and Chris Callison-Burch

Exploiting Semantics in Neural Machine Translation with Graph Convolutional Networks
Diego Marcheggiani, Joost Bastings and Ivan Titov

Incremental Decoding and Training Methods for Simultaneous Translation in Neural Machine Translation
Fahim Dalvi, Nadir Durrani, Hassan Sajjad and Stephan Vogel

Learning Hidden Unit Contribution for Adapting Neural Machine Translation Models
David Vilar

Neural Machine Translation Decoding with Terminology Constraints
Eva Hasler, Adrià de Gispert, Gonzalo Iglesias and Bill Byrne

On the Evaluation of Semantic Phenomena in Neural Machine Translation Using Natural Language Inference
Adam Poliak, Yonatan Belinkov, James Glass and Benjamin Van Durme

Using Word Vectors to Improve Word Alignments for Low Resource Machine Translation
Nima Pourdamghani, Marjan Ghazvininejad and Kevin Knight

When and Why Are Pre-Trained Word Embeddings Useful for Neural Machine Translation?
Ye Qi, Devendra Sachan, Matthieu Felix, Sarguna Padmanabhan and Graham Neubig

June 3 (continued)

15:30–17:00 Phonology, Morphology and Word Segmentation 2

Are All Languages Equally Hard to Language-Model?
Ryan Cotterell, Sebastian J. Mielke, Jason Eisner and Brian Roark

The Computational Complexity of Distinctive Feature Minimization in Phonology
Hubie Chen and Mans Hulden

Unsupervised Disambiguation of Syncretism in Inflected Lexicons
Ryan Cotterell, Christo Kirov, Sebastian J. Mielke and Jason Eisner

17:00–18:30 Test of Time Session (in honor of Aravind Joshi)

17:00–17:15 ***Awards and Remembrances***

17:15–17:40 *BLEU: a Method for Automatic Evaluation of Machine Translation (Test of Time)*
Kishore Papineni, Salim Roukos, Todd Ward and Wei-Jing Zhu, IBM Research

17:40–18:05 *Discriminative Training Methods for Hidden Markov Models: Theory and Experiments with Perceptron Algorithms (Test of Time)*
Michael Collins, Columbia University

18:05–18:30 *Thumbs up?: Sentiment Classification using Machine Learning Techniques (Test of Time)*
Bo Pang, Lillian Lee, Shivakumar Vaithyanathan, Cornell University, IBM Research

June 4

07:45–08:45 Breakfast

08:45–09:00 Announcements

09:00–10:00 Keynote 3 (sponsored by Bloomberg)

Google Assistant or My Assistant? Towards Personalized Situated Conversational Agents
Dilek Hakkani-Tür

10:00–10:30 Morning Coffee

10:30–11:30 Information Extraction 4

10:30–11:30 Semantics 4

10:30–11:30 Generation 2

10:30–12:00 Question Answering 2

Contextualized Word Representations for Reading Comprehension
Shimi Salant and Jonathan Berant

Crowdsourcing Question-Answer Meaning Representations
Julian Michael, Gabriel Stanovsky, Luheng He, Ido Dagan and Luke Zettlemoyer

Leveraging Context Information for Natural Question Generation
Linfeng Song, Zhiguo Wang, Wael Hamza, Yue Zhang and Daniel Gildea

Robust Machine Comprehension Models via Adversarial Training
Yicheng Wang and Mohit Bansal

June 4 (continued)

Simple and Effective Semi-Supervised Question Answering
Bhuwan Dhingra, Danish Danish and Dheeraj Rajagopal

TypeSQL: Knowledge-Based Type-Aware Neural Text-to-SQL Generation
Tao Yu, Zifan Li, Zilin Zhang, Rui Zhang and Dragomir Radev

10:30–12:00 Social Media and Computational Social Science 3

Community Member Retrieval on Social Media Using Textual Information
Aaron Jaech, Shobhit Hathi and Mari Ostendorf

Cross-Domain Review Helpfulness Prediction Based on Convolutional Neural Networks with Auxiliary Domain Discriminators
Cen Chen, Yinfei Yang, Jun Zhou, Xiaolong Li and Forrest Sheng Bao

Predicting Foreign Language Usage from English-Only Social Media Posts
Svitlana Volkova, Stephen Ranshous and Lawrence Phillips

10:30–12:00 Summarization 2

A Discourse-Aware Attention Model for Abstractive Summarization of Long Documents
Arman Cohan, Franck Dernoncourt, Doo Soon Kim, Trung Bui, Seokhwan Kim, Walter Chang and Nazli Goharian

A Mixed Hierarchical Attention Based Encoder-Decoder Approach for Standard Table Summarization
Parag Jain, Anirban Laha, Karthik Sankaranarayanan, Preksha Nema, Mitesh M. Khapra and Shreyas Shetty

Effective Crowdsourcing for a New Type of Summarization Task
Youxuan Jiang, Catherine Finegan-Dollak, Jonathan K. Kummerfeld and Walter Lasecki

Key2Vec: Automatic Ranked Keyphrase Extraction from Scientific Articles using Phrase Embeddings
Debanjan Mahata, John Kuriakose, Rajiv Ratn Shah and Roger Zimmermann

Learning to Generate Wikipedia Summaries for Underserved Languages from Wikidata
Lucie-Aimée Kaffee, Hady Elsahar, Pavlos Vougiouklis, Christophe Gravier, Frederique Laforest, Jonathon Hare and Elena Simperl

June 4 (continued)

Multi-Reward Reinforced Summarization with Saliency and Entailment
Ramakanth Pasunuru and Mohit Bansal

Objective Function Learning to Match Human Judgements for Optimization-Based Summarization
Maxime Peyrard and Iryna Gurevych

Pruning Basic Elements for Better Automatic Evaluation of Summaries
Ukyo Honda, Tsutomu Hirao and Masaaki Nagata

Unsupervised Keyphrase Extraction with Multipartite Graphs
Florian Boudin

Where Have I Heard This Story Before? Identifying Narrative Similarity in Movie Remakes
Snigdha Chaturvedi, Shashank Srivastava and Dan Roth

11:30–12:30 Dialogue and Interactive Systems 1

11:30–12:30 Information Extraction 5

11:30–12:30 Generation 3

12:30–14:00 Lunch

13:00–14:00 *NAACL Business Meeting*
Julia Hockenmaier, University of Illinois at Urbana-Champaign

June 4 (continued)

14:00–15:30 Sentiment Analysis 2

15:12–15:30 *Multimodal Emoji Prediction*
Francesco Barbieri, Miguel Ballesteros, Francesco Ronzano and Horacio Saggion

14:00–15:30 Discourse and Pragmatics 2

15:12–15:30 *Higher-Order Coreference Resolution with Coarse-to-Fine Inference*
Kenton Lee, Luheng He and Luke Zettlemoyer

14:00–15:30 Tagging, Chunking, Syntax and Parsing 3

14:54–15:12 *Non-Projective Dependency Parsing with Non-Local Transitions*
Daniel Fernández-González and Carlos Gómez-Rodríguez

14:00–15:30 Cognitive Modeling and Psycholinguistics 2

Detecting Linguistic Characteristics of Alzheimer's Dementia by Interpreting Neural Models
Sweta Karlekar, Tong Niu and Mohit Bansal

14:00–15:30 Dialogue and Interactive Systems 2

Deep Dungeons and Dragons: Learning Character-Action Interactions from Role-Playing Game Transcripts
Annie Louis and Charles Sutton

Feudal Reinforcement Learning for Dialogue Management in Large Domains
Iñigo Casanueva, Paweł Budzianowski, Pei-Hao Su, Stefan Ultes, Lina M. Rojas Barahona, Bo-Hsiang Tseng and Milica Gasic

June 4 (continued)

14:00–15:30 Text Mining 2

Evaluating Historical Text Normalization Systems: How Well Do They Generalize?
Alexander Robertson and Sharon Goldwater

Gated Multi-Task Network for Text Classification
Liqiang Xiao, Honglun Zhang and Wenqing Chen

Natural Language to Structured Query Generation via Meta-Learning
Po-Sen Huang, Chenglong Wang, Rishabh Singh, Wen-tau Yih and Xiaodong He

Smaller Text Classifiers with Discriminative Cluster Embeddings
Mingda Chen and Kevin Gimpel

14:00–15:30 Speech 2

Role-specific Language Models for Processing Recorded Neuropsychological Exams
Tuka Al Hanai, Rhoda Au and James Glass

Slot-Gated Modeling for Joint Slot Filling and Intent Prediction
Chih-Wen Goo, Guang Gao, Yun-Kai Hsu, Chih-Li Huo, Tsung-Chieh Chen, Keng-Wei Hsu and Yun-Nung Chen

June 4 (continued)

14:00–15:30 Vision, Robotics and Other Grounding 3

An Evaluation of Image-Based Verb Prediction Models against Human Eye-Tracking Data
Spandana Gella and Frank Keller

Learning to Color from Language
Varun Manjunatha, Mohit Iyyer, Jordan Boyd-Graber and Larry Davis

Punny Captions: Witty Wordplay in Image Descriptions
Arjun Chandrasekaran, Devi Parikh and Mohit Bansal

The Emergence of Semantics in Neural Network Representations of Visual Information
Dhanush Dharmaretnam and Alona Fyshe

Visual Referring Expression Recognition: What Do Systems Actually Learn?
Volkan Cirik, Louis-Philippe Morency and Taylor Berg-Kirkpatrick

Visually Guided Spatial Relation Extraction from Text
Taher Rahgooy, Umar Manzoor and Parisa Kordjamshidi

Watch, Listen, and Describe: Globally and Locally Aligned Cross-Modal Attentions for Video Captioning
Xin Wang, Yuan-Fang Wang and William Yang Wang

June 4 (continued)

15:30–16:00 Afternoon Coffee

17:00–18:15 Outstanding Paper Session (sponsored by Amazon)