

December 13

9:00-9:30 Opening (Chair: Nicoletta Calzolari)**Opening Address**

Makoto Nagao

9:30-10:30 Invited talk 1 (Chair: Yuji Matsumoto)**Universal Dependencies -- Dubious Linguistics and Crappy Parsing?**

Joakim Nivre (Uppsala University)

Universal Dependencies is a framework for cross-linguistically consistent treebank annotation that has so far been applied to over 50 languages. It was developed primarily to support multilingual parsing research, but the resources have proven useful for a wide range of studies that were not foreseen originally, including research on language typology. A basic design principle in Universal Dependencies is to give priority to grammatical relations between content words, which are more likely to be parallel across languages, and to treat function words essentially as features of content words. This principle has been criticized both for being incompatible with theoretical linguistics, which tend to treat function words as syntactic heads, and for being suboptimal as a representation for dependency parsing, where higher accuracy is often observed with function words as heads. I will argue that both of these criticisms rest on a misinterpretation of the syntactic representations, and I will show that an alternative interpretation is compatible with both sound linguistics and improved parsing technology.

11:00-12:30 Oral (3 x 4 sessions)

	1-A: Syntactic and Semantic Parsing, Grammar Induction I (Daisuke Kawahara)	1-B: Natural Language Generation, Summarization I (Hiroya Takamura)	1-C: Applications I (Tim Baldwin)	1-D: Resources, Software, Tools & Under-resourced languages I (Nancy Ide)
Rooms	Conference Hall	1202	1008	1009
11:00 – 11:30	Boosting for Efficient Model Selection for Syntactic Parsing Rachel Bawden and Benoît Crabbé (#861)	A Redundancy-Aware Sentence Regression Framework for Extractive Summarization Pengjie Ren, Furu Wei, Zhumin CHEN, Jun MA and Ming Zhou (#223)	CATENA: CAusal and TEMPoral relation extraction from NATural language texts Paramita Mirza and Sara Tonelli (#68)	Expanding wordnets to new languages with multilingual sense disambiguation Mihael Arcan, John Philip McCrae and Paul Buitelaar (#483)
11:30 – 12:00	A Universal Framework for Inductive Transfer Parsing across Multi-typed Treebanks	Generating Video Description using Sequence-to-sequence Model with Temporal Attention	Forecasting Word Model: Twitter-based Influenza Surveillance and Prediction	A Correlational Encoder Decoder Architecture for Pivot Based Sequence Generation

	Jiang Guo, Wanxiang Che, Haifeng Wang and Ting Liu (#975)	Natsuda Laokulrat, Sang Phan, Noriki Nishida, Raphael Shu, Yo Ehara, Naoaki Okazaki, Yusuke Miyao and Hideki Nakayama (#1040)	Hayate ISO, Shoko WAKAMIYA and Eiji ARAMAKI (#125)	Amrita Saha, Mitesh M. Khapra, Sarath Chandar, Janarthanan Rajendran and Kyunghyun Cho (#467)
12:00 – 12:30	Grammar induction from (lots of) words alone John K Pate and Mark Johnson (#1008)	An Improved Phrase-based Approach to Annotating and Summarizing Student Course Responses Wencan Luo, Fei Liu and Diane Litman (#303)	Task-Oriented Intrinsic Evaluation of Semantic Textual Similarity Nils Reimers, Philip Beyer and Iryna Gurevych (#173)	Zero-resource Dependency Parsing: Boosting Delexicalized Cross-lingual Transfer with Linguistic Knowledge Lauriane Aufrant, Guillaume Wisniewski and François Yvon (#618)

14:00-16:00 Oral (4 x 4 sessions) + poster (26)

	2-A: Machine Learning for NLP I (Trevor Cohn)	2-B: Morphology, Segmentation Tagging, Chunking I (Mamoru Komachi)	2-C: Natural Language Generation, Summarization II (Udo Hahn)	2-D: Speech Recognition, Text-To-Speech, Spoken Language Understanding (Kristiina Jokinen)
Rooms	Conference Hall	1202	1008	1009
14:00 – 14:30	Improving historical spelling normalization with bi-directional LSTMs and multi-task learning Marcel Bollmann and Anders Søgaard (#554)	Label Embedding for Zero-shot Fine-grained Named Entity Typing Yukun Ma, Erik Cambria and SA GAO (#136)	Exploring Text Links for Coherent Multi-Document Summarization Xun Wang, Masaaki Nishino, Tsutomu Hirao, Katsuhito Sudoh and Masaaki Nagata (#1016)	Exploiting Sentence and Context Representations in Deep Neural Models for Spoken Language Understanding Lina M. Rojas Barahona, Milica Gasic, Nikola Mrkšić, Pei-Hao Su, Stefan Ultes, Tsung-Hsien Wen and Steve Young (#176)
14:30 – 15:00	Deceptive Opinion Spam Detection	The Role of Context in Neural	Syntactic realization with	Predictive Incremental

	Using Neural Network Yafeng Ren and Yue Zhang (#127)	Morphological Disambiguation Qinlan Shen, Daniel Clothiaux, Emily Tagtow, Patrick Littell and Chris Dyer (#321)	data-driven neural tree grammars Brian McMahan and Matthew Stone (#1104)	Parsing Helps Language Modeling Arne Köhn and Timo Baumann (#686)
15:00 – 15:30	Integrating Topic Modeling with Word Embeddings by Mixtures of vMFs Ximing Li, Jinjin Chi, Changchun Li, Jihong Ouyang and Bo Fu (#131)	Asynchronous Parallel Learning for Neural Networks and Structured Models with Dense Features Xu Sun (#1151)	Abstractive News Summarization based on Event Semantic Link Network Wei Li, Lei He and Hai Zhuge (#415)	A Neural Attention Model for Disfluency Detection Shaolei Wang, Wanxiang Che and Ting Liu (#811)
15:30 – 16:00	Bayesian Language Model based on Mixture of Segmental Contexts for Spontaneous Utterances with Unexpected Words Ryu Takeda and Kazunori Komatani (#207)	An Empirical Exploration of Skip Connections for Sequential Tagging Huijia Wu, Jiajun Zhang and Chengqing Zong (#930)	A General Optimization Framework for Multi-Document Summarization Using Genetic Algorithms and Swarm Intelligence Maxime Peyrard and Judith Eckle-Kohler (#547)	EMPTY

Posters (26): 12F Foyer

<p><i>Morphology, Segmentation, Tagging, Chunking</i></p> <ol style="list-style-type: none"> Detecting Sentence Boundaries in Sanskrit Texts <i>Oliver Hellwig</i> (#46) Consistent Word Segmentation, Part-of-Speech Tagging and Dependency Labelling Annotation for Chinese Language <i>Mo Shen, Wingmui Li, HyunJeong Choe, Chenhui Chu, Daisuke Kawahara and Sadao Kurohashi</i> (#300) Attending to Characters in Neural Sequence Labeling Models <i>Marek Rei, Gamal Crichton and Sampo Pyysalo</i> (#349) A Word Labeling Approach to Thai Sentence Boundary Detection and POS Tagging

Nina Zhou, AiTi Aw, Nattadaporn Lertcheva and Xuancong Wang
(#417)

5. **Assigning Fine-grained PoS Tags based on High-precision Coarse-grained Tagging** *Tobias Horsmann and Torsten Zesch*
(#534)
6. **Data-Driven Morphological Analysis and Disambiguation for Morphologically Rich Languages and Universal Dependencies**
Amir More and Reut Tsarfaty
(#940)
7. **Automatic Syllabification for Manipuri language**
Loitongbam Gyanendro Singh, Lenin Laitonjam and Sanasam Ranbir Singh
(#1116)

Speech Recognition, Text-To-Speech, Spoken Language Understanding I

8. **Learning to Distill: The Essence Vector Modeling Framework**
Kuan-Yu Chen, Shih-Hung Liu, Berlin Chen and Hsin-Min Wang
(#234)
9. **Continuous Expressive Speaking Styles Synthesis based on CVSM and MR-HMM**
Jaime Lorenzo-Trueba, Roberto Barra-Chicote, Ascension Gallardo-Antolin, Junichi Yamagishi and Juan M Montero
(#245)
10. **An Automatic Prosody Tagger for Spontaneous Speech**
Monica Dominguez, Mireia Farrús and Leo Wanner
(#738)
11. **Frustratingly Easy Neural Domain Adaptation**
Young-Bum Kim, Karl Stratos and Ruhi Sarikaya
(#867)

Syntactic and Semantic Parsing, Grammar Induction

12. **A House United: Bridging the Script and Lexical Barrier between Hindi and Urdu**
Riyaz A. Bhat, Irshad A. Bhat, Naman Jain and Dipti Misra Sharma
(#33)
13. **Deeper syntax for better semantic parsing**
Olivier Michalon, Corentin Ribeyre, Marie Candito and Alexis Nasr
(#161)
14. **Language Independent Dependency to Constituent Tree Conversion**
Young-Suk Lee and Zhiguo Wang
(#167)
15. **Promoting multiword expressions in A* TAG parsing**
Jakub Waszczuk, Agata Savary and Yannick Parmentier
(#766)

Under-resourced Languages

16. **Incrementally Learning a Dependency Parser to Support Language Documentation in Field Linguistics**
Morgan Ulinski, Julia Hirschberg and Owen Rambow
 (#97)
17. **Inducing Multilingual Text Analysis Tools Using Bidirectional Recurrent Neural Networks**
Othman ZENNAKI, Nasredine Semmar and Laurent Besacier
 (#109)
18. **Bitext Name Tagging for Cross-lingual Entity Annotation Projection**
Dongxu Zhang, Boliang Zhang, Xiaoman Pan, Xiaocheng Feng, Heng Ji and Weiran XU
 (#356)
19. **Determining the Multiword Expression Inventory of a Surprise Language**
Bahar Salehi, Paul Cook and Timothy Baldwin
 (#401)
20. **A Hybrid Deep Learning Architecture for Sentiment Analysis**
Md Shad Akhtar, Ayush Kumar, Asif Ekbal and Pushpak Bhattacharyya
 (#779)
21. **Word Segmentation in Sanskrit Using Path Constrained Random Walks**
Amrith Krishna, Bishal Santra, Pavankumar Satuluri, Sasi Prasanth Bandaru, Bhumi Faldu, Yajuvendra Singh and Pawan Goyal
 (#1020)
22. **Mongolian Named Entity Recognition System with Rich Features**
Weihua Wang, Feilong Bao and Guanglai Gao
 (#1158)

Applications I

23. **Appraising UMLS Coverage for Summarizing Medical Evidence**
Elaheh ShafieiBavani, Mohammad Ebrahimi, Raymond Wong and Fang Chen
 (#1087)
24. **Large-scale Multi-class and Hierarchical Product Categorization for an E-commerce Giant**
Ali Cevahir and Koji Murakami
 (#408)
25. **Product Classification in E-Commerce using Distributional Semantics**
Vivek Gupta, Harish Karnick, Ashendra Bansal and Pradhuman Jhala
 (#664)
26. **Representation and Learning of Temporal Relations**
Leon Derczynski
 (#810)

16:30-18:00 Oral (3 x 4 sessions) + poster (21)

Sessions (Chair)	3-A: Natural Language Generation, Summarization III (Michael Strube)	3-B: Syntactic and Semantic Parsing, Grammar Induction II	3-C: Morphology, Segmentation Tagging, Chunking II (Erhard Hinrichs)	3-D: Applications II (Leon Derczynski)
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		(Yusuke Miyao)		
Rooms	Conference Hall	1202	1008	1009
16:30 – 17:00	AttSum: Joint Learning of Focusing and Summarization with Neural Attention Ziqiang Cao, Wenjie Li, Sujian Li, Furu Wei and Yanran Li (#386)	Cross-lingual Learning of an Open-domain Semantic Parser Kilian Evang and Johan Bos (#853)	Keystroke dynamics as signal for shallow syntactic parsing Barbara Plank (#735)	GAKE: Graph Aware Knowledge Embedding Jun Feng, Minlie Huang, Yang Yang and Xiaoyan Zhu (#589)
17:00 – 17:30	Using Relevant Public Posts to Enhance News Article Summarization Chen Li, Zhongyu Wei, Yang Liu Yang Jin and Fei Huang (#1076)	A subtree-based factorization of dependency parsing Qiuye Zhao and Qun Liu (#1084)	A Bayesian model for joint word alignment and part-of-speech transfer Robert Östling (#578)	Ranking Responses Oriented to Conversational Relevance in Chat-bots Bowen Wu, Baoxun Wang and Hui Xue (#434)
17:30 – 18:00	A Proposition-Based Abstractive Summariser Yimai Fang, Haoyue Zhu, Ewa Muszyńska, Alexander Kuhnle and Simone Teufel (#1098)	K-SRL: Instance-based Learning for Semantic Role Labeling Alan Akbik and Yunyao Li (#1091)	Splitting compounds with ngrams Naomi Tachikawa Shapiro (#1050)	Probabilistic Prototype Model for Serendipitous Property Mining Taesung Lee, Seung-won Hwang and Zhongyuan Wang (#569)

Posters (21): 12F Foyer

<i>Computational Psycholinguistics I</i>
1. Identifying Cross-Cultural Differences in Word Usage Aparna Garimella, Rada Mihalcea and James Pennebaker (#85)
2. Reading Time Annotation of "Balanced Corpus of Contemporary Written Japanese" Masayuki Asahara, Hajime Ono and Edson T. Miyamoto (#230)
3. "How Bullying is this Message?": A Psychometric Thermometer for Bullying

Parma Nand, Rivindu Perera and Abhijeet Kasture
(#343)

4. **Learning grammatical categories using paradigmatic representations: Substitute words for language acquisition**

Mehmet Ali Yatbaz, Volkan Cirik, Aylin Küntay and Deniz Yuret
(#383)

5. **Understanding the Lexical Simplification Needs of Non-Native Speakers of English**

Gustavo Paetzold and Lucia Specia
(#615)

6. **How Interlocutors Coordinate with each other within Emotional Segments?**

Firoj Alam, Shammur Absar Chowdhury, Morena Danieli and Giuseppe Riccardi
(#926)

Linguistic Issues in NLP

7. **Advancing Linguistic Features and Insights by Label-informed Feature Grouping: An Exploration in the Context of Native Language Identification**

Serhiy Bykh and Detmar Meurers
(#304)

8. **Modeling Diachronic Change in Scientific Writing with Information Density**

Raphael Rubino, Stefania Degaetano-Ortlieb, Elke Teich and Josef van Genabith
(#309)

9. **Different Contexts Lead to Different Word Embeddings**

Wenpeng Hu, Jiajun Zhang and Nan Zheng
(#402)

10. **Machine Learning for Metrical Analysis of English Poetry**

Manex Agirrezabal, Mans Hulden and Iñaki Alegria
(#464)

11. **Automated speech-unit delimitation in spoken learner English**

Russell Moore, Andrew Caines, Calbert Graham and Paula Buttery
(#535)

12. **Learning to Identify Sentence Parallelism in Student Essays**

Wei Song, Tong Liu, Ruiji Fu, Lizhen Liu, Hanshi Wang and Ting Liu
(#596)

13. **Evaluating anaphora and coreference resolution to improve automatic keyphrase extraction**

Marco Basaldella, Giorgia Chiaradia and Carlo Tasso
(#654)

14. **Retrieving Occurrences of Grammatical Constructions**

Anna Ehrlemark, Richard Johansson and Benjamin Lyngfelt
(#755)

15. **Automatic Extraction of Learner Errors in ESL Sentences Using Linguistically Enhanced Alignments**

Mariano Felice, Christopher Bryant and Ted Briscoe
(#893)

16. Contrasting Vertical and Horizontal Transmission of Typological Features

Kenji Yamauchi and Yugo Murawaki
(#944)

17. How Regular is Japanese Loanword Adaptation? A Computational Study

Lingshuang Mao and Mans Hulden
(#1025)

18. Using Linguistic Data for English and Spanish Verb-Noun Combination Identification

Uxoá Iñurrieta, Arantza Díaz de Ilarraza, Gorka Labaka, Kepa Sarasola, Itziar Aduriz and John Carroll
(#1187)

Applications II

19. Analyzing Gender Bias in Student Evaluations

Andamlak Terkik, Emily Prud'hommeaux, Cecilia Ovesdotter Alm, Christopher Homan and Scott Franklin
(#812)

20. Adverse Drug Reaction Classification With Deep Neural Networks

Trung Huynh, Yulan He, Alistair Willis and Stefan Rueger
(#367)

21. Chinese Preposition Selection for Grammatical Error Diagnosis

Hen-Hsen Huang, Yen-Chi Shao and Hsin-Hsi Chen
(#243)

December 14

9:00-10:00 Invited talk 2 (Chair: Yuji Matsumoto)

Getting the Input Right: Refining our Understanding of What Children Hear

Reiko Mazuka (RIKEN Brain Science Institute & Duke University)

As models for language learning become increasingly sophisticated, it is essential to pay close attention to the purported input received by learners. This talk presents two examples of phonological input for which a failure to account for relevant factors has led to misleading conclusions. A fully annotated dataset of infant-directed speech is now allowing a more refined analysis of what children actually hear. The first example concerns vowel-duration contrasts (long vs. short) in Japanese. One previous study, working under the assumption that long and short vowels occurred with equal frequency, concluded that the distinction could be learned by a simple distributional model. Our dataset, however, reveals that (a) in reality over 90% of vowels in Japanese are short, and (b) the distribution of long vowel duration is entirely encompassed within that of short vowels. The second example concerns the widely accepted claim that when adults speak to infants (infant-directed speech, IDS), they speak with a slower speech rate than when speaking to adults (adult-directed speech, ADS). Studies supporting this conclusion, however, have consistently failed to account for the fact that IDS utterances are shorter than those of ADS. Our dataset differentiates between utterance-internal speech rate and utterance-final lengthening, and finds taken separately, these values almost identical between IDS and ADS. As it turns out, IDS appeared to have a slower overall rate only because of the greater frequency of utterance-final segments.

10:30-12:00 Oral (3 x 4 sessions) + poster (21)

	4-A: Morphology, Segmentation, Tagging, Chunking III (Nizar Habash)	4-B: Applications III (Anna Korhonen)	4-C: Computational Psycholinguistics and Linguistic Issues in NLP I (Allan Ramsay)	4-D: Resources, Software, Tools & Under-resourced languages II (Nianwen Xue)
Rooms	Conference Hall	1202	1008	1009
10:30 – 11:00	<p>Extending the Use of Adaptor Grammars for Unsupervised Morphological Segmentation of Unseen Languages</p> <p>Ramy Eskander, Owen Rambow and Tianchun Yang</p> <p>(#1080)</p>	<p>Extracting Discriminative Keyphrases with Learned Semantic Hierarchies</p> <p>Yunli Wang, Yong Jin, Xiaodan Zhu and Cyril Goutte</p> <p>(#331)</p>	<p>Memory-Bounded Left-Corner Unsupervised Grammar Induction on Child-Directed Input</p> <p>Cory Shain, William Bryce, Lifeng Jin, Victoria Krakovna, Finale Doshi-Velez, Timothy Miller, William Schuler and Lane Schwartz</p> <p>(#209)</p>	<p>Named Entity Recognition for Linguistic Rapid Response in Low-Resource Languages: Sorani Kurdish and Tajik</p> <p>Patrick Littell, Kartik Goyal, David R. Mortensen, Alexa Little, Chris Dyer and Lori Levin</p> <p>(#795)</p>
11:00 – 11:30	<p>CharNER: Character-Level Named Entity Recognition</p> <p>Onur Kuru, Ozan Arkan Can and Deniz Yuret</p> <p>(#376)</p>	<p>Hashtag Recommendation Using End-To-End Memory Networks with Hierarchical Attention</p> <p>Haoran Huang, Qi Zhang, Yeyun Gong and Xuanjing Huang</p> <p>(#594)</p>	<p>‘Calling on the classical phone’: a distributional model of adjective-noun errors in learners’ English</p> <p>Aur�lie Herbelot and Ekaterina Kochmar</p> <p>(#96)</p>	<p>Multilingual supervision of semantic annotation</p> <p>Peter Exner, Marcus Klang and Pierre Nugues</p> <p>(#565)</p>
11:30 – 12:00	<p>A Neural Model for Part-of-Speech Tagging in Historical Texts</p> <p>Christian Hardmeier</p> <p>(#834)</p>	<p>Automatic Labelling of Topics with Neural Embeddings</p> <p>Shraey Bhatia, Jey Han Lau and Timothy Baldwin</p> <p>(#646)</p>	<p>Are Cohesive Features Relevant for Text Readability Evaluation?</p> <p>Amalia Todirascu, Thomas Francois, Delphine Bernhard, Nuria Gala and Anne-Laure Ligozat</p> <p>(#606)</p>	<p>Siamese Convolutional Networks for Cognate Identification</p> <p>Taraka Rama</p> <p>(#1117)</p>

Posters (21): 12F Foyer

Natural Language Generation, Summarization I

1. **Exploring Differential Topic Models for Comparative Summarization on Scientific Papers**
Lei He, Wei Li and Hai Zhuge
(#642)
2. **Bridging the gap between extractive and abstractive summaries: Creation and evaluation of coherent extracts from heterogeneous sources**
Darina Benikova, Margot Mieskes, Christian M. Meyer and Iryna Gurevych
(#671)
3. **Chinese Poetry Generation with Planning based Neural Network**
Zhe Wang, Wei He, Hua Wu, Haiyang Wu, Wei Li, Haifeng Wang and Enhong Chen
(#678)
4. **Predicting sentential semantic compatibility for aggregation in text-to-text generation**
Victor Chenal and Jackie Chi Kit Cheung
(#762)
5. **Sequential Clustering and Contextual Importance Measures for Incremental Update Summarization**
Markus Zopf, Eneldo Loza Mencía and Johannes Fürnkranz
(#768)
6. **Natural Language Generation through Character-based RNNs with Finite-state Prior Knowledge**
Raghav Goyal, Marc Dymetman and Eric Gaussier
(#774)
7. **A Hybrid Approach to Generation of Missing Abstracts in Biomedical Literature**
Suchet Chachra, Asma Ben Abacha, Sonya Shooshan, Laritza Rodriguez and Dina Demner-Fushman
(#807)
8. **Imitation learning for language generation from unaligned data**
Gerasimos Lampouras and Andreas Vlachos
(#920)
9. **Product Review Summarization by Exploiting Phrase Properties**
Naitong Yu, Minlie Huang, Yuanyuan Shi and xiaoyan zhu
(#972)
10. **Generating Questions and Multiple-Choice Answers using Semantic Analysis of Texts**
Jun Araki, Dheeraj Rajagopal, Sreecharan Sankaranarayanan, Susan Holm, Yukari Yamakawa and Teruko Mitamura
(#1024)

Resources, Software and Tools I

11. **Evaluation Strategies for Computational Construction Grammar**
Tania Marques and Katrien Beuls
(#59)

12. **Building a Monolingual Parallel Corpus for Text Simplification Using Sentence Similarity Based on Alignment between Word Embeddings**
Tomoyuki Kajiwara and Mamoru Komachi
(#133)
13. **Word2Vec vs DBnary: Augmenting METEOR using Vector Representations or Lexical Resources?**
Christophe Servan, Alexandre Berard, zied elloumi, Hervé Blanchon and Laurent Besacier
(#184)
14. **Broad Twitter Corpus: A Diverse Named Entity Recognition Resource**
Leon Derczynski, Kalina Bontcheva and Ian Roberts
(#192)
15. **Semantic overfitting: what 'world' do we consider when evaluating disambiguation of text?**
Filip Ilievski, Marten Postma and Piek Vossen
(#430)

Information Retrieval, Information Extraction, Question Answering I

16. **Extraction of Keywords of Novelties From Patent Claims**
Shoko Suzuki and Hiromichi Takatsuka
(#532)
17. **Leveraging Multilingual Training for Limited Resource Event Extraction**
Andrew Hsi, Yiming Yang, Jaime Carbonell and Ruo Chen Xu
(#546)
18. **LILI: A Simple Language Independent Approach for Language Identification**
Mohamed Al-Badrashiny and Mona Diab
(#197)
19. **High Accuracy Rule-based Question Classification using Question Syntax and Semantics**
Harish Tayyar Madabushi and Mark Lee
(#271)
20. **Incorporating Label Dependency for Answer Quality Tagging in Community Question Answering via CNN-LSTM-CRF**
Yang Xiang, Xiaoqiang Zhou, Qingcai Chen, Zhihui Zheng, Buzhou Tang, Xiaolong Wang and Yang Qin
(#581)
21. **Semantically Motivated Hebrew Verb-Noun Multi-Word Expressions Identification**
Chaya Liebeskind and Yaakov HaCohen-Kerner
(#354)

December 15

9:00-10:00 **Invited talk 3** (Chair: Yuji Matsumoto)

NLP to support clinical tasks and decisions

Dina Demner-Fushman (U.S. National Library of Medicine)

Clinical decision support (CDS) provides clinicians and patients with information needed to enhance health and health care. Clinical NLP -- natural language processing methods to support healthcare by operationalizing clinical information contained in clinical narrative -- is an integral part of CDS. Clinical NLP has started in the early 1960s, with several successful applications now integrated in daily care. I will first discuss the successful applications that are already positively impacting clinical practice, as well as publicly available resources, including those developed by our group. Consumer language understanding is an equally important and rapidly evolving part of CDS. In the second part of the talk, I will present our work in understanding consumer health questions. I will conclude with the challenges and opportunities to contribute to these fascinating research areas that have practical implications for our health.

10:30-12:30 Oral (4 x 4 sessions) + poster (26)

	5-A: Semantic Processing, Distributional Semantics, Compositionality I (Chris Biemann)	5-B: Computational Psycholinguistics and Linguistic Issues in NLP II (Lori Levin)	5-C: Lexical Semantics, Ontologies & Paraphrasing, Textual Entailment I (Kentaro Inui)	5-D: Machine Translation I (Graham Neubig)
Rooms	Conference Hall	1202	1008	1009
10:30 – 11:00	Semantic Relation Classification via Hierarchical Recurrent Neural Network with Attention Minguang Xiao and Cong Liu (#404)	Survey on the Use of Typological Information in Natural Language Processing Helen O'Horan, Yevgeni Berzak, Ivan Vulic, Roi Reichart and Anna Korhonen (#831)	Sentence Similarity Learning by Lexical Decomposition and Composition Zhiguo Wang, Haitao Mi and Abraham Ittycheriah (#47)	Fast Gated Neural Domain Adaptation: Language Model as a Case Study Jian Zhang, Xiaofeng Wu, Andy Way and Qun Liu (#872)
11:00 – 11:30	A Unified Architecture for Semantic Role Labeling and Relation Classification Jiang Guo, Wanxiang Che, Haifeng Wang, Ting Liu and Jun Xu (#965)	From phonemes to images: levels of representation in a recurrent neural model of visually-grounded language learning Lieke Gelderloos and Grzegorz Chrupala (#748)	Chinese Hypernym-Hyponym Extraction from User Generated Categories Chengyu Wang, Xiaofeng He, Xiaofeng He and Aoying Zhou (#43)	Machine Translation Evaluation for Arabic using Morphologically-enriched Embeddings Francisco Guzmán, Houda Bouamor, Ramy Baly and Nizar Habash (#882)
11:30 – 12:00	Facing the most difficult case of Semantic Role Labeling: A collaboration of	Linguistic features for Hindi light verb construction identification	Dynamic Generative model for Diachronic Sense	Ensemble Learning for Multi-Source Neural Machine Translation

	word embeddings and co-training Quynh Ngoc Thi Do, Steven Bethard and Marie-Francine Moens (#685)	Ashwini Vaidya, Sumeet Agarwal and Martha Palmer (#1019)	Emergence Detection Martin Emms and Arun kumar Jayapal (#265)	Ekaterina Garmash and Christof Monz (#1039)
12:00 – 12:30	Predictability of Distributional Semantics in Derivational Word Formation Sebastian Padó, Aurélie Herbelot, Max Kisselew and Jan Šnajder (#696)	Cross-lingual Transfer of Correlations between Parts of Speech and Gaze Features Maria Barrett, Frank Keller and Anders Søgaard (#754)	Semi-supervised Word Sense Disambiguation with Neural Models Dayu Yuan, Julian Richardson, Ryan Doherty, Colin Evans and Eric Altendorf (#802)	Phrase-based Machine Translation using Multiple Preordering Candidates Yusuke Oda, Taku Kudo, Tetsuji Nakagawa and Taro Watanabe (#1132)

Posters (26): 12F Foyer

Information Retrieval, Information Extraction, Question Answering II

1. **Hand in Glove: Deep Feature Fusion Network Architectures for Answer Quality Prediction in Community Question Answering**
Sai Praneeth Suggu, Kushwanth Naga Goutham, Manoj K. Chinnakotla and Manish Shrivastava
 (#42)
2. **Learning Event Expressions via Bilingual Structure Projection**
Fangyuan Li, Ruihong Huang, Deyi Xiong and Min Zhang
 (#970)
3. **Global Inference to Chinese Temporal Relation Extraction**
Peifeng Li, Qiaoming Zhu, Guodong Zhou and Hongling Wang
 (#52)
4. **Improved relation classification by deep recurrent neural networks with data augmentation**
Yan Xu, Ran Jia, Lili Mou, Ge Li, Yunchuan Chen, Yangyang Lu and Zhi Jin
 (#384)
5. **Relation Extraction with Multi-instance Multi-label Convolutional Neural Networks**
Xiaotian Jiang, Quan Wang, Peng Li and Bin Wang
 (#421)
6. **Named Entity Disambiguation for little known referents: a topic-based approach**
Andrea Glaser and Jonas Kuhn
 (#512)

Natural Language Generation, Summarization II

7. **Building RDF Content for Data-to-Text Generation**
Laura Perez-Beltrachini, Rania SAYED and Claire Gardent
(#222)
8. **Parallel Sentence Compression**
Julia Ive and François Yvon
(#677)
9. **An Unsupervised Multi-Document Summarization Framework Based on Neural Document Model**
Shulei Ma, Zhi-Hong Deng and Yunlun Yang
(#454)
10. **From OpenCCG to AI Planning: Detecting Infeasible Edges in Sentence Generation**
Maximilian Schwenger, Alvaro Torralba, Joerg Hoffmann, David M. Howcroft and Vera Demberg
(#561)
11. **The Next Step for Multi-Document Summarization: A Heterogeneous Multi-Genre Corpus Built with a Novel Construction Approach**
Markus Zopf, Maxime Peyrard and Judith Eckle-Kohler
(#634)

Sentiment Analysis, Computational Argumentation I

12. **SentiHood: Targeted Aspect Based Sentiment Analysis Dataset for Urban Neighbourhoods**
Marzieh Saeidi, Guillaume Bouchard, Maria Liakata and Sebastian Riedel
(#70)
13. **On the Impact of Seed Words on Sentiment Polarity Lexicon Induction**
Dame Jovanoski, Veno Pachovski and Preslav Nakov
(#144)
14. **Evaluating Argumentative and Narrative Essays using Graphs**
Swapna Somasundaran, Brian Riordan and Binod Gyawali
(#145)
15. **Selective Co-occurrences for Word-Emotion Association**
Ameeta Agrawal and Aijun An
(#786)
16. **Weighted Neural Bag-of-n-grams Model: New Baselines for Text Classification**
Bofang Li, Zhe Zhao, Tao Liu, Puwei Wang and Xiaoyong Du
(#152)
17. **A Deeper Look into Sarcastic Tweets Using Deep Convolutional Neural Networks**
Soujanya Poria, Erik Cambria, Devamanyu Hazarika and Prateek Vij
(#181)
18. **Exploring Distributional Representations and Machine Translation for Aspect-based Cross-lingual Sentiment Classification.**
Jeremy Barnes, Patrik Lambert and Toni Badia
(#326)

19. **A Bilingual Attention Network for Code-switched Emotion Prediction**
Zhongqing Wang, Yue Zhang, Sophia Lee, Shoushan Li and Guodong Zhou
 (#392)

20. **UTCNN: a Deep Learning Model of Stance Classification on Social Media Text**
Wei-Fan Chen and Lun-Wei Ku
 (#438)

Computational Psycholinguistics II

21. **The Role of Intrinsic Motivation in Artificial Language Emergence: a Case Study on Colour**
Miquel Cornudella, Thierry Poibeau and Remi van Trijp
 (#305)

22. **Predicting the Evocation Relation between Lexicalized Concepts**
Yoshihiko Hayashi
 (#332)

23. **Collecting and Exploring Everyday Language for Predicting Psycholinguistic Properties of Words**
Gustavo Paetzold and Lucia Specia
 (#650)

Applications III

24. **Using Argument Mining to Assess the Argumentation Quality of Essays**
Henning Wachsmuth, Khalid Al Khatib and Benno Stein
 (#447)

25. **Grammatical Templates: Improving Text Difficulty Evaluation for Language Learners**
Shuhan Wang and Erik Andersen
 (#121)

26. **Still not there? Comparing Traditional Sequence-to-Sequence Models to Encoder-Decoder Neural Networks on Monotone String Translation Tasks**
Carsten Schnober, Steffen Eger, Erik-Lân Do Dinh and Iryna Gurevych
 (#551)

14:00-16:00 Oral (4 x 4 sessions) + poster (25)

	6-A: Information Retrieval, Information Extraction, Question Answering I (Akiko Aizawa)	6-B: Machine Learning for NLP II (Anders Søgaard)	6-C: Machine Translation II (Taro Watanabe)	6-D: Semantic Processing, Distributional Semantics, Compositionality II (Sebastian Riedel)
Rooms	Conference Hall	1202	1008	1009
14:00 – 14:30	Towards Time-Aware Knowledge Graph Completion	Recurrent Dropout without Memory Loss	Interactive-Predictive Machine Translation based on	Direct vs. indirect evaluation of distributional thesauri

	Tingsong Jiang, Tianyu Liu, Tao Ge, Lei Sha, Baobao Chang, Sujian Li and Zhifang Sui (#576)	Stanislau Semeniuta, Aliaksei Severyn and Erhardt Barth (#505)	Syntactic Constraints of Prefix Na Ye, Guiping Zhang and Dongfeng Cai (#100)	Vincent Claveau and Ewa Kijak (#809)
14:30 – 15:00	Learning to Weight Translations using Ordinal Linear Regression and Query-generated Training Data for Ad-hoc Retrieval with Long Queries Javid Dadashkarimi, Masoud Jalili Sabet and Azadeh Shakery (#782)	Modeling topic dependencies in semantically coherent text spans with copulas Georgios Balikas, Hesam Amoualian, Marianne Clausel, Massih R Amini and Eric Gaussier (#533)	Topic-Informed Neural Machine Translation Jian Zhang, Liangyou Li, Andy Way and Qun Liu (#240)	D-GloVe: A Feasible Least Squares Model for Estimating Word Embedding Densities Shoaib Jameel and Steven Schockaert (#603)
15:00 – 15:30	Neural Attention for Learning to Rank Questions in Community Question Answering Salvatore Romeo, Giovanni Da San Martino, Alberto Barrón-Cedeño, Alessandro Moschitti, Yonatan Belinkov, Wei-Ning Hsu, Yu Zhang, Mitra Mohtarami and James Glass (#851)	Consensus Attention-based Neural Networks for Chinese Reading Comprehension Yiming Cui, Ting Liu, Zhipeng Chen, Shijin Wang and Guoping Hu (#90)	A Distribution-based Model to Learn Bilingual Word Embeddings Hailong Cao, Tiejun Zhao, Shu ZHANG and Yao Meng (#433)	Predicting human similarity judgments with distributional models: The value of word associations. Simon De Deyne, Amy Perfors and Daniel J Navarro (#983)
15:30 – 16:00	Simple Question Answering by Attentive Convolutional Neural Network	Semantic Annotation Aggregation with Conditional Crowdsourcing Models and	Pre-Translation for Neural Machine Translation Jan Niehues, Eunah Cho,	Distributional Hypernym Generation by Jointly Learning Clusters and Projections

	Wenpeng Yin, Mo Yu, Bing Xiang, Bowen Zhou and Hinrich Schütze (#537)	Word Embeddings Paul Felt, Eric Ringger and Kevin Seppi (#890)	Thanh-Le Ha and Alex Waibel (#478)	Josuke Yamane, Tomoya Takatani, Hitoshi Yamada, Makoto Miwa and Yutaka Sasaki (#1030)
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Posters (25): 12F Foyer

Discourse Relations, Coreference, Pragmatics

1. **Incremental Fine-grained Information Status Classification Using Attention-based LSTMs**
Yufang Hou
(#135)
2. **Detection, Disambiguation and Argument Identification of Discourse Connectives in Chinese Discourse Parsing**
Yong-Siang Shih and Hsin-Hsi Chen
(#335)
3. **Multi-view and multi-task training of RST discourse parsers**
Chloé Braud, Barbara Plank and Anders Søgaard
(#457)
4. **Implicit Discourse Relation Recognition with Context-aware Character-enhanced Embeddings**
Lianhui Qin, Zhisong Zhang and Hai Zhao
(#541)
5. **Measuring Non-cooperation in Dialogue**
Brian Plüss and Paul Piwek
(#737)
6. **Revisiting the Evaluation for Cross Document Event Coreference**
Shyam Upadhyay, Nitish Gupta, Christos Christodoulopoulos and Dan Roth
(#907)
7. **Modeling Discourse Segments in Lyrics Using Repeated Patterns**
Kento Watanabe, Yuichiroh Matsubayashi, Naho Orita, Naoaki Okazaki, Kentaro Inui, Satoru Fukayama, Tomoyasu Nakano, Jordan Smith and Masataka Goto
(#1144)

Dialog Processing and Dialog Systems, Multimodal Interfaces

8. **Multi-level Gated Recurrent Neural Network for dialog act classification**
Wei Li and Yunfang Wu
(#120)
9. **Multimodal Mood Classification - A Case Study of Differences in Hindi and Western Songs**
Braja Gopal Patra, Dipankar Das and Sivaji Bandyopadhyay
(#200)

10. **Detecting Context Dependent Messages in a Conversational Environment**
Chaozhuo Li, Yu Wu, Wei Wu, Chen Xing, Zhoujun Li and Ming Zhou
(#347)
11. **Joint Inference for Mode Identification in Tutorial Dialogues**
Deepak Venugopal and Vasile Rus
(#992)
12. **Dialogue Act Classification in Domain-Independent Conversations Using a Deep Recurrent Neural Network**
Hamed Khanpour, Nishitha Guntakandla and Rodney Nielsen
(#998)
13. **Non-sentential Question Resolution using Sequence to Sequence Learning**
Vineet Kumar and Sachindra Joshi
(#1007)
14. **Context-aware Natural Language Generation for Spoken Dialogue Systems**
Hao Zhou, Minlie Huang and xiaoyan zhu
(#1023)

Speech Recognition, Text-To-Speech, Spoken Language Understanding II

15. **Weakly-supervised text-to-speech alignment confidence measure**
Guillaume Serrière, Christophe Cerisara, Dominique Fohr and Odile Mella
(#170)
16. **Domainless Adaptation by Constrained Decoding on a Schema Lattice**
Young-Bum Kim, Karl Stratos and Ruhi Sarikaya
(#870)
17. **Sub-Word Similarity based Search for Embeddings: Inducing Rare-Word Embeddings for Word Similarity Tasks and Language Modelling**
Mittul Singh, Clayton Greenberg, Youssef Oualil and Dietrich Klakow
(#311)

Applications IV

18. **Semi-automatic Detection of Cross-lingual Marketing Blunders based on Pragmatic Label Propagation in Wiktionary**
Christian M. Meyer, Judith Eckle-Kohler and Iryna Gurevych
(#670)
19. **Ambient Search: A Document Retrieval System for Speech Streams**
Benjamin Milde, Jonas Wacker, Stefan Radomski, Max Mühlhäuser and Chris Biemann
(#674)
20. **Semi-supervised Gender Classification with Joint Textual and Social Modeling**
Shoushan Li, Bin Dai, Zhengxian Gong and Guodong Zhou
(#148)
21. **Predicting proficiency levels in learner writings by transferring a linguistic complexity model from expert-written coursebooks**
Ildikó Pálán, Elena Volodina and Torsten Zesch
(#399)

<p>22. User Classification with Multiple Textual Perspectives <i>Dong Zhang, Shoushan Li, Hongling Wang and Guodong Zhou</i> (#360)</p>
<p>23. Says Who...? Identification of Expert versus Layman Critics' Reviews of Documentary Films <i>Ming Jiang and Jana Diesner</i> (#865)</p>
<p>24. Knowledge-Driven Event Embedding for Stock Prediction <i>Xiao Ding, Yue Zhang, Ting Liu and Junwen Duan</i> (#241)</p>
<p>25. Distributed Representations for Building Profiles of Users and Items from Text Reviews <i>Wenliang Chen, Zhenjie Zhang, Zhenghua Li and Min Zhang</i> (#257)</p>

16:30-18:00 Oral (3 x 4 sessions) + poster (21)

	7-A: Machine Translation III (Min Zhang)	7-B: Applications IV (Naoaki Okazaki)	7-C: Computational Psycholinguistics and Linguistic Issues in NLP III (William Schuler)	7-D: Lexical Semantics, Ontologies & Paraphrasing, Textual Entailment II (Roy Bar-Haim)
Rooms	Conference Hall	1202	1008	1009
16:30 – 17:00	<p>Improving Statistical Machine Translation with Selectional Preferences</p> <p>Haqing Tang, Deyi Xiong, Min Zhang and Zhengxian Gong (#492)</p>	<p>Get Semantic With Me! The Usefulness of Different Feature Types for Short-Answer Grading</p> <p>Ulrike Pado (#695)</p>	<p>Data-driven learning of symbolic constraints for a log-linear model in a phonological setting</p> <p>Gabriel Doyle and Roger Levy (#1021)</p>	<p>Textual Entailment with Structured Attentions and Composition</p> <p>Kai Zhao, Liang Huang and Mingbo Ma (#1011)</p>
17:00 – 17:30	<p>Hierarchical Permutation Complexity for Word Order Evaluation</p> <p>Miloš Stanojević and Khalil Sima'an (#536)</p>	<p>Automatically Processing Tweets from Gang-Involved Youth: Towards Detecting Loss and Aggression</p> <p>Terra Blevins, Robert Kwiatkowski, Maha Ahmed, Jamie MacBeth, Kathleen McKeown,</p>	<p>Chinese Tense Labelling and Causal Analysis</p> <p>Hen-Hsen Huang, Chang-Rui Yang and Hsin-Hsi Chen (#1153)</p>	<p>plWordNet 3.0 -- a Comprehensive Lexical-Semantic Resource</p> <p>Marek Maziarz, Maciej Piasecki, Ewa Rudnicka, Stan Szpakowicz and Paweł Kędzia (#821)</p>

		Desmond Patton and Owen Rambow (#819)		
17:30 – 18:00	Interactive Attention for Neural Machine Translation Fandong Meng, Zhengdong Lu, Hang Li and Qun Liu (#563)	Content-based Influence Modeling for Opinion Behavior Prediction Chengyao Chen, Zhitao Wang, Yu Lei and Wenjie Li (#895)	Exploring Topic Discriminating Power of Words in Latent Dirichlet Allocation Yang Kai, Cai Yi, Chen Zhenhong, Leung Ho-fung and LAU Raymond (#1162)	Time-Independent and Language-Independent Extraction of Multiword Expressions From Twitter Nikhil Londhe, Rohini Srihari and Vishrawas Gopalakrishnan (#1079)

Posters (21): 12F Foyer

Information Retrieval, Information Extraction, Question Answering

1. **Incremental Global Event Extraction**
Alex Judea and Michael Strube
(#587)
2. **Hierarchical Memory Networks for Answer Selection on Unknown Words**
Jiaming Xu, Jing Shi, Yiqun Yao, Suncong Zheng, Bo Xu and Bo Xu
(#597)
3. **Revisiting Taxonomy Induction over Wikipedia**
Amit Gupta, Francesco Piccinno, Mikhail Kozhevnikov, Marius Pasca and Daniele Pighin
(#731)
4. **Joint Learning of Local and Global Features for Entity Linking via Neural Networks**
Thien Huu Nguyen, Nicolas Fauceglia, Mariano Rodriguez Muro, Oktie Hassanzadeh, Alfio Massimiliano Gliozzo and Mohammad Sadoghi
(#753)
5. **Structured Aspect Extraction** Omer Gunes
Giorgio Orsi and Tim Furché
(#780)
6. **Robust Text Classification for Sparsely Labelled Data Using Multi-level Embeddings**
Simon Baker, Douwe Kiela and Anna Korhonen
(#863)
7. **Mathematical Information Retrieval based on Type Embeddings and Query Expansion**
Yiannos Stathopoulos and Simone Teufel
(#902)
8. **Text Retrieval by Term Co-occurrences in a Query-based Vector Space**

Eriks Sneiders
(#45)

9. **Pairwise Relation Classification with Mirror Instances and a Combined Convolutional Neural Network**

Jianfei Yu and Jing Jiang
(#978)

10. **FastHybrid: A Hybrid Model for Efficient Answer Selection**

Lidan Wang, Ming Tan and Jiawei Han
(#1057)

11. **Extracting Spatial Entities and Relations in Korean Text**

Bogyum Kim and Jae Sung Lee
(#1085)

12. **Hybrid Question Answering over Knowledge Base and Free Text**

kun xu, Yansong Feng, Songfang Huang and Dongyan Zhao
(#1155)

13. **Improved Word Embeddings with Implicit Structure Information**

Jie Shen and Cong Liu
(#462)

Sentiment Analysis, Computational Argumentation

14. **Word Embeddings and Convolutional Neural Network for Arabic Sentiment Classification**

Abdelghani Dahou, Shengwu Xiong, Junwei Zhou, Mohamed Houcine Haddoud and Pengfei Duan
(#456)

15. **Combination of Convolutional and Recurrent Neural Network for Sentiment Analysis of Short Texts**

Xingyou Wang, Weijie Jiang and Zhiyong Luo
(#498)

16. **Stance Classification in Rumours as a Sequential Task Exploiting the Tree Structure of Social Media Conversations**

Arkaitz Zubiaga, Elena Kochkina, Maria Liakata, Rob Procter and Michal Lukasik
(#635)

17. **Tweet Sarcasm Detection Using Deep Neural Network**

Meishan Zhang, Yue Zhang and Guohong Fu
(#150)

18. **Agreement and Disagreement: Comparison of Points of View in the Political Domain**

Stefano Menini and Sara Tonelli
(#816)

19. **Targeted Sentiment to Understand Student Comments**

Charles Welch and Rada Mihalcea
(#837)

20. **Towards Sub-Word Level Compositions for Sentiment Analysis of Hindi-English Code Mixed Text**

Ameya Prabhu, Aditya Joshi, Manish Shrivastava and Vasudeva Varma
(#931)

21. Distance Metric Learning for Aspect Phrase Grouping
Shufeng Xiong, Yue Zhang, Donghong Ji and Yinxia Lou
(#934)

December 16

9:00-10:00 Invited talk 4 (Chair: Yuji Matsumoto)

A Look at Computational Argumentation and Summarisation from a Text-Understanding Perspective

Simone Teufel (University of Cambridge)

In the past five years, computational argumentation has emerged as a new, active research field. This field studies all aspects of analysing and generating human argumentation, including argument mining, supportive debating technologies, logical representation of arguments, models of reasoning, and the connection of discourse processing and argumentation. As somebody who is mainly interested in the text-understanding challenges of computational argumentation, I think this new field has the potential to advance (and provide means of evaluating) the text-understanding capabilities of today's NLP systems.

When humans construct an argument in order to convince others, how do they order and structure the information they want to convey? I will argue that whatever principles are at work, they are almost identical to those needed when summarising a text. Amongst the relations of particular interest are entailment, causal and rhetorical relationships. I will give an overview of currently available (text understanding-based) analysis methods that can inform our understanding of these principles, and I will also say a few words about a proposition-based approach to summarisation we have developed at Cambridge University that has the potential to contribute insights to computational argumentation.

10:30-12:30 Oral (4 x 4 sessions) + poster (24)

	8-A: Information Retrieval, Information Extraction, Question Answering II (Le Sun)	8-B: Machine Translation IV (Yang Liu)	8-C: Discourse Relations, Coreference, Pragmatics (Matthew Stone)	8-D: Sentiment Analysis, Computational Argumentation I (Iryna Gurevych)
Rooms	Conference Hall	1202	1008	1009
10:30 – 11:00	Constraint-Based Question Answering with Knowledge Graph Junwei Bao, Nan Duan, Zhao Yan, Ming Zhou and Tiejun Zhao (#1168)	Bilingual Autoencoders with Global Descriptors for Modeling Parallel Sentences Biao Zhang, Deyi Xiong, jinsong su, Hong Duan and Min Zhang	Anecdote Recognition and Recommendation Wei Song, Ruiji Fu, Lizhen Liu, Hanshi Wang and Ting Liu (#62)	Aspect Based Sentiment Analysis using Sentiment Flow with Local and Non-local Neighbor Information Shubham Pateria (#313)

		(#542)		
11:00 – 11:30	Selecting Sentences versus Selecting Tree Constituents for Automatic Question Ranking Alberto Barrón-Cedeño, Giovanni Da San Martino, Salvatore Romeo and Alessandro Moschitti (#721)	Multi-Engine and Multi-Alignment Based Automatic Post-Editing and its Impact on Translation Productivity Santanu Pal, Sudip Kumar Naskar and Josef van Genabith (#595)	Training Data Enrichment for Infrequent Discourse Relations Kailang Jiang, Giuseppe Carenini and Raymond Ng (#815)	Two-View Label Propagation to Semi-supervised Reader Emotion Classification Shoushan Li, Jian Xu, Dong Zhang and Guodong Zhou (#99)
11:30 – 12:00	Attention-Based Convolutional Neural Network for Semantic Relation Extraction yatian shen and Xuanjing Huang (#728)	Measuring the Effect of Conversational Aspects on Machine Translation Quality Marlies van der Wees, Arianna Bisazza and Christof Monz (#645)	Inferring Discourse Relations from PDTB-style Discourse Labels for Argumentative Revision Classification Fan Zhang, Diane Litman and Katherine Forbes-Riley (#881)	A Joint Sentiment-Target-Stance Model for Stance Classification in Tweets Javid Ebrahimi, Dejing Dou and Daniel Lowd (#894)
12:00 – 12:30	Table Filling Multi-Task Recurrent Neural Network for Joint Entity and Relation Extraction Pankaj Gupta, Hinrich Schütze and Bernt Andrassy (#353)	Enriching Phrase Tables for Statistical Machine Translation Using Mixed Embeddings Peyman Passban, Qun Liu and Andy Way (#759)	Capturing Pragmatic Knowledge in Article Usage Prediction using LSTMs Jad Kabbara, Yulan Feng and Jackie Chi Kit Cheung (#1058)	SenticNet 4: A Semantic Resource for Sentiment Analysis Based on Conceptual Primitives Erik Cambria, Soujanya Poria, Rajiv Bajpai and Bjoern Schuller (#198)

Posters (24): 12F Foyer

Machine Learning

1. **Joint Embedding of Hierarchical Categories and Entities for Concept Categorization and Dataless Classification**
Yuezhong(Music) Li, Ronghuo Zheng, Tian Tian, Rahul Iyer, Zhiting Hu and Katia Sycara
(#216)
2. **Latent Topic Embedding**
Di Jiang, Lei Shi, Rongzhong Lian and Hua Wu
(#225)
3. **Neural-based Noise Filtering from Word Embeddings**
Kim Anh Nguyen, Sabine Schulte im Walde and Ngoc Thang Vu
(#475)
4. **Integrating Distributional and Lexical Information for Semantic Classification of Words using MRMF**
Rosa Tsegaye Aga, Lars Schmidt-Thieme, Christian Wartena and Lucas Drumond
(#591)
5. **Semi Supervised Preposition-Sense Disambiguation using Multilingual Data**
Hila Gonen and Yoav Goldberg
(#619)
6. **Monday mornings are my fave :) #not Exploring the Automatic Recognition of Irony in English tweets**
Cynthia Van Hee, Els Lefever and Veronique Hoste
(#626)
7. **CNN- and LSTM-based Claim Classification in Online User Comments**
Chinnappa Guggilla, Tristan Miller and Iryna Gurevych
(#792)
8. **Experiments in Idiom Recognition**
Jing Peng and Anna Feldman
(#933)
9. **An Empirical Evaluation of various Deep Learning Architectures for Bi-Sequence Classification Tasks**
Anirban Laha and Vikas Raykar
(#1143)
10. **Learning Succinct Models: Pipelined Compression with L1-Regularization, Hashing, Elias-Fano Indices, and Quantization**
Hajime Senuma and Akiko Aizawa
(#1170)

Semantic Processing, Distributional Semantics, Compositionality I

11. **Bad Company—Neighborhoods in Neural Embedding Spaces Considered Harmful**
Johannes Hellrich and Udo Hahn
(#785)
12. **Implementing a Reverse Dictionary, based on word definitions, using a Node-Graph Architecture**
Sushrut Thorat and Varad Choudhari
(#813)

13. **Is an Image Worth More than a Thousand Words? On the Fine-Grain Semantic Differences between Visual and Linguistic Representations**
Guillem Collell and Marie-Francine Moens
(#839)
14. **On the contribution of word embeddings to temporal relation classification**
Paramita Mirza and Sara Tonelli
(#868)
15. **Modeling Context-sensitive Selectional Preference with Distributed Representations**
Naoya Inoue, Yuichiroh Matsubayashi, Masayuki Ono, Naoaki Okazaki and Kentaro Inui
(#887)
16. **Exploring the value space of attributes: Unsupervised bidirectional clustering of adjectives in German**
Wiebke Petersen and Oliver Hellwig
(#922)
17. **Distributional Inclusion Hypothesis for Tensor-based Composition**
Dimitri Kartsaklis and Mehrnoosh Sadrzadeh
(#942)
18. **Parameter estimation of Japanese predicate argument structure analysis model using eye gaze information**
Ryosuke Maki, Hitoshi Nishikawa and Takenobu Tokunaga
(#1163)

Paraphrasing, Textual Entailment

19. **Reading and Thinking: Re-read LSTM Unit for Textual Entailment Recognition**
Lei Sha, Baobao Chang, Zhifang Sui and Sujian Li
(#114)
20. **A Paraphrase and Semantic Similarity Detection System for User Generated Short-Text Content on Microblogs**
Kuntal Dey, Ritvik Shrivastava and Saroj Kaushik
(#116)
21. **Modeling Extractive Sentence Intersection via Subtree Entailment**
Omer Levy, Ido Dagan, Gabriel Stanovsky, Judith Eckle-Kohler and Iryna Gurevych
(#296)
22. **Context-Sensitive Inference Rule Discovery: A Graph-Based Method**
Xianpei Han and Le Sun
(#339)
23. **Modelling Sentence Pairs with Tree-structured Attentive Encoder**
Yao Zhou, Cong Liu and Yan Pan
(#364)
24. **Neural Paraphrase Generation with Stacked Residual LSTM Networks**
aaditya prakash, Sadid A. Hasan, Kathy Lee, Vivek Datla, Ashequl Qadir, Joey Liu and Oladimeji Farri
(#945)

14:00-15:30 Oral (3 x 4 sessions) + poster (20)

	9-A: Information Retrieval, Information Extraction, Question Answering III (Key-Sun Choi)	9-B: Sentiment Analysis, Computational Argumentation II (Manfred Stede)	9-C: Applications V (Manabu Okumura)	9-D: Resources, Software, Tools & Under-resourced languages III (James Pustejovsky)
Rooms	Conference Hall	1202	1008	1009
14:00 – 14:30	<p>English-Chinese Knowledge Base Translation with Neural Network</p> <p>Xiaocheng Feng, Duyu Tang, Bing Qin and Ting Liu</p> <p>(#770)</p>	<p>“All I know about politics is what I read in Twitter”: Weakly Supervised Models for Extracting Politicians’ Stances From Twitter</p> <p>Kristen Johnson and Dan Goldwasser</p> <p>(#915)</p>	<p>Fast Inference for Interactive Models of Text</p> <p>Jeffrey Lund, Paul Felt, Kevin Seppi and Eric Ringger</p> <p>(#718)</p>	<p>Better call Saul: Flexible Programming for Learning and Inference in NLP</p> <p>Parisa Kordjamshidi, Daniel Khashabi, Christos Christodoulopoulos, Bhargav Mangipudi, Sameer Singh and Dan Roth</p> <p>(#761)</p>
14:30 – 15:00	<p>Keyphrase Annotation with Graph Co-Ranking</p> <p>Adrien Bougouin, Florian Boudin and Beatrice Daille</p> <p>(#267)</p>	<p>Leveraging Multiple Domains for Sentiment Classification</p> <p>Fan Yang, Arjun Mukherjee and Yifan Zhang</p> <p>(#355)</p>	<p>Combining Heterogeneous User Generated Data to Sense Well-being</p> <p>Adam Tsakalidis, Maria Liakata, Theo Damoulas, Brigitte Jellinek, Weisi Guo and Alexandra Cristea</p> <p>(#772)</p>	<p>Crowdsourcing Complex Language Resources: Playing to Annotate Dependency Syntax</p> <p>Bruno Guillaume, Karèn Fort and Nicolas Lefebvre</p> <p>(#667)</p>
15:00 – 15:30	<p>What’s in an Explanation? Characterizing Knowledge and Inference Requirements for Elementary Science Exams</p> <p>Peter Jansen, Niranjana Balasubramanian,</p>	<p>Political News Sentiment Analysis for Under-resourced Languages</p> <p>Patrik F. Bakken, Terje A. Bratlie, Cristina Marco and Jon Atle Gulla</p>	<p>Hashtag Recommendation with Topical Attention-Based LSTM</p> <p>Yang Li, Ting Liu, Jing Jiang and Liang Zhang</p> <p>(#927)</p>	<p>Borrow a Little from your Rich Cousin: Using Embeddings and Polarities of English Words for Multilingual Sentiment Classification</p>

	Mihai Surdeanu and Peter Clark (#1028)	(\$487)		Prerana Singhal and Pushpak Bhattacharyya (#798)
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Posters (20): 12F Foyer

Machine Translation

1. **A Character-Aware Encoder for Neural Machine Translation**
Zhen Yang, Wei Chen, Feng Wang and Bo Xu
(#201)
2. **Convolution-Enhanced Bilingual Recursive Neural Network for Bilingual Semantic Modeling**
Jinsong Su, Biao Zhang, Deyi Xiong, Ruochen Li and Jianmin Yin
(#260)
3. **Improving Attention Modeling with Implicit Distortion and Fertility for Machine Translation**
Shi Feng, Shujie Liu, Nan Yang, Mu Li, Ming Zhou and Kenny Q. Zhu
(#379)
4. **Neural Machine Translation with Supervised Attention**
Lemao Liu, Masao Utiyama, Andrew Finch and Eiichiro Sumita
(#381)
5. **Lightly Supervised Quality Estimation**
Matthias Sperber, Graham Neubig, Jan Niehues, Sebastian Stüker and Alex Waibel
(#413)
6. **Improving Translation Selection with Supersenses**
Haiqing Tang, Deyi Xiong, Oier Lopez de Lacalle and Eneko Agirre
(#605)
7. **Is all that Glitters in Machine Translation Quality Estimation really Gold?**
Yvette Graham, Timothy Baldwin, Meghan Dowling, Maria Eskevich, Teresa Lynn and Lamia Tounsi
(#649)
8. **Connecting Phrase based Statistical Machine Translation Adaptation**
Rui Wang, Hai Zhao, Bao-Liang Lu, Masao Utiyama and Eiichiro Sumita
(#658)
9. **Fast Collocation-Based Bayesian HMM Word Alignment**
Philip Schulz and Wilker Aziz
(#693)
10. **Learning to translate from graded and negative relevance information**
Laura Jehl and Stefan Riezler
(#699)
11. **Universal Reordering via Linguistic Typology**
Joachim Daiber, Miloš Stanojević and Khalil Sima'an
(#704)

12. **A Deep Fusion Model for Domain Adaptation in Phrase-based MT**
Nadir Durrani, Hassan Sajjad, Shafiq Joty and Ahmed Abdelali
 (#757)
13. **Inducing Bilingual Lexica From Non-Parallel Data With Earth Mover's Distance Regularization**
Meng Zhang, Yang Liu, Huanbo Luan, Yiqun Liu and Maosong Sun
 (#892)
14. **What Makes Word-level Neural Machine Translation Hard: A Case Study on English-German Translation**
Fabian Hirschmann, Jinseok Nam and Johannes Fürnkranz
 (#989)
15. **Improving Word Alignment of Rare Words with Word Embeddings**
Masoud Jalili Sabet, Hesham Faili and Gholamreza Haffari
 (#1120)

Applications V

16. **Measuring the Information Content of Financial News**
Ching-Yun Chang, Yue Zhang, Zhiyang Teng, Zahn Bozanic and Bin Ke
 (#391)
17. **Automatic Generation and Classification of Minimal Meaningful Propositions in Educational Systems**
Andreea Godea, Florin Bulgarov and Rodney Nielsen
 (#840)
18. **First Story Detection using Entities and Relations**
Nikolaos Panagiotou, Cem Akkaya, Kostas Tsioutsoulis, Vana Kalogeraki and Dimitrios Gunopoulos
 (#845)
19. **Textual Complexity of the Prompt as a Predictor of Difficulty of Listening Items**
Anastassia Loukina, Su-Youn Yoon, Youhua Wei, Jennifer Sakano and Kathy Sheehan
 (#115)
20. **The Construction of a Chinese Collocational Knowledge Resource and Its Application for Second Language Acquisition**
Renfen HU, Jiayong Chen and Kuang-hua Chen
 (#506)

16:00-17:30 Oral (3 x 4 sessions) + poster (19)

	10-A: Information Retrieval, Information Extraction, Question Answering IV (Noriko Kando)	10-B: Sentiment Analysis, Computational Argumentation III (Kazuhide Yamamoto)	10-C: Applications VI (Yuki Arase)	10-D: Dialog Processing and Dialog Systems, Multimodal Interfaces (Hideki Tanaka)
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Rooms	Conference Hall	1202	1008	1009
16:00 – 16:30	Joint Inference for Event Coreference Resolution Jing Lu, Deepak Venugopal, Vibhav Gogate and Vincent Ng (#1109)	Corpus Fusion for Emotion Classification Suyang Zhu, Shoushan Li, Ying Chen and Guodong Zhou (#102)	Video Event Detection by Exploiting Word Dependencies from Image Captions Sang Phan, Yusuke Miyao, Duy-Dinh Le and Shin'ichi Satoh (#1119)	Sequence to Backward and Forward Sequences: A Content-Introducing Approach to Generative Short-Text Conversation Lili Mou, Yiping Song, Rui Yan, Ge Li, Lu Zhang and Zhi Jin (#377)
16:30 – 17:00	Event Detection with Burst Information Networks Tao Ge, Lei Cui, Baobao Chang, Zhifang Sui and Ming Zhou (#1167)	Effective LSTMs for Target-Dependent Sentiment Classification Duyu Tang, Bing Qin, Xiaocheng Feng and Ting Liu (#5)	Predicting Restaurant Consumption Level through Social Media Footprints Yang Xiao, Yuan Wang, Hangyu Mao and Zhen Xiao (#1179)	Disfluent but effective? A quantitative study of disfluencies and conversational moves in team discourse Felix Gervits, Kathleen Eberhard and Matthias Scheutz (#724)
17:00 – 17:30		Towards assessing depth of argumentation Manfred Stede (#1070)	A Novel Fast Framework for Topic Labeling Based on Similarity-preserved Hashing Xian-Ling Mao, Yi-Jing Hao, Qiang Zhou, Wen-Qing Yuan, Liner Yang and Heyan Huang (#1182)	A Neural Network Approach for Knowledge-Driven Response Generation Pavlos Vougiouklis, Jonathon Hare and Elena Simperl (#1082)

Posters (19): 12F Foyer

Resources, Software, Tools II

1. PersoNER: Persian Named-Entity Recognition

Hanieh Poostchi, Ehsan Zare Borzeshi, Mohammad Abdous and Massimo Piccardi
(#372)

2. **OCR++: A Robust Framework For Information Extraction from Scholarly Articles**
Mayank Singh, Barnopriyo Barua, Priyank Palod, Manvi Garg, Sidhartha Satapathy, Samuel Bushi, Kumar Ayush, Krishna Sai Rohith, Tulasi Gamidi, Pawan Goyal and Animesh Mukherjee
(#394)
3. **Efficient Data Selection for Bilingual Terminology Extraction from Comparable Corpora**
Amir Hazem and Emmanuel Morin
(#301)
4. **TweetGeo – A Tool for Collecting, Processing and Analysing Geo-encoded Linguistic Data**
Nikola Ljubešić, Tanja Samardzic and Curdin Derungs
(#470)
5. **Extending WordNet with Fine-Grained Collocational Information via Supervised Distributional Learning**
Luis Espinosa Anke, Jose Camacho-Collados, Sara Rodríguez-Fernández, Horacio Saggion and Leo Wanner
(#476)
6. **A News Editorial Corpus for Mining Argumentation Strategies**
Khalid Al Khatib, Henning Wachsmuth, Johannes Kiesel, Matthias Hagen and Benno Stein
(#632)
7. **Universal Dependencies for Turkish**
Umut Sulubacak, Memduh Gokirmak, Francis Tyers, Çağrı Çöltekin, Joakim Nivre and Gülşen Eryiğit
(#719)
8. **Creating Resources for Dialectal Arabic from a Single Annotation: A Case Study on Egyptian and Levantine**
Ramy Eskander, Nizar Habash, Owen Rambow and Arfath Pasha
(#918)
9. **Multilingual Aliasing for Auto-Generating Proposition Banks**
Alan Akbik, Xinyu Guan and Yunyao Li
(#979)
10. **PanPhon: A Resource for Mapping IPA Segments to Articulatory Feature Vectors**
David R. Mortensen, Patrick Littell, Akash Bharadwaj, Kartik Goyal, Chris Dyer and Lori Levin
(#1101)

Semantic Processing, Distributional Semantics, Compositionality II

11. **Text Classification Improved by Integrating Bidirectional LSTM with Two-dimensional Max Pooling**
Peng Zhou, Zhenyu Qi, Suncong Zheng, Jiaming Xu, Hongyun Bao and Bo Xu
(#294)
12. **More is not always better: balancing sense distributions for all-words Word Sense Disambiguation**
Marten Postma, Ruben Izquierdo Bevia and Piek Vossen

(#422)

13. Language classification from bilingual word embedding graphs

Steffen Eger, Armin Hoenen and Alexander Mehler

(#489)

14. Word Embeddings, Analogies, and Machine Learning: Beyond king - man + woman = queen

Aleksandr Drozd, Anna Gladkova and Satoshi Matsuoka

(#555)

15. Semantic Tagging with Deep Residual Networks

Johannes Bjerva, Barbara Plank and Johan Bos

(#639)

Lexical Semantics, Ontologies

16. A Supervised Approach for Enriching the Relational Structure of Frame Semantics in FrameNet

Shafqat Mumtaz Virk, Philippe Muller and Juliette Conrath

(#77)

17. Reddit Temporal N-gram Corpus and its Applications on Paraphrase and Semantic Similarity in Social Media using a Topic-based Latent Semantic Analysis

Anh Dang, Abidalrahman Moh'd, Aminul Islam, Rosane Minghim, Michael Smit and Evangelos Milios

(#672)

18. Dictionaries as Networks: Identifying the graph structure of Ogden's Basic English

Camilo Garrido and Claudio Gutierrez

(#1029)

19. Structured Generative Models of Continuous Features for Word Sense Induction

Alexandros Komninos and Suresh Manandhar

(#1094)

17:45-18:30 Closing (best paper awards)