



**The 52nd Annual Meeting of the
Association for Computational Linguistics**

**Proceedings of the Conference
Volume 1: Long Papers**

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USA
Tel: +1-570-476-8006
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acl@aclweb.org

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Preface: General Chair

I remember with great fondness the first ACL Conference I attended 20 years ago in Las Cruces, New Mexico. Some things have changed: papers presented there that I considered interesting or inconsequential have switched positions in my personal ranking as I learned more and more about our field; single sessions have long been replaced by parallel sessions to accommodate an ever increasing number of research contributions; the number of associated workshops and posters has mushroomed beyond anyone's dream. Almost without noticing, we transitioned from small conferences of a few hundred to conferences that bring together 1000 plus participants from all over the world. Our field has matured significantly attracting the attention of not only a handful of academics, but successful industries and Research Labs as well. Some things have stayed the same though: ACL continues to be the pre-eminent conference in our field and the best place to meet and make like-minded friends, discuss tantalizing tricks that you can learn about only in face-to-face communication settings, and celebrate the results we get.

ACL Conferences are never possible without the dedication and hard work of many people. Because ACL'2014 is no exception to this, I would like to thank each and every person who has volunteered their time to make the event possible.

Priscilla Rasmussen, the ACL Business Manager, and the ACL Executive Committee (Haifeng Wang, Gertjan van Noord, Graeme Hirst, Dragomir Radev, Renata Vieira, Jian Su, Min-Yen Kan, Stephen Clark, and Hal Daumé III) have been instrumental in setting ACL'2014 in motion and in guiding the ACL'2014 committee along the path from concept to execution. Without the collective memory and hands-on guidance of the committee, an ACL conference will never happen.

The ACL'2014 Committee did a fantastic job making this conference possible. The committee covered a lot of ground from logistics to paper selection, to co-located event selection and publishing. The masterminds of all these intertwining tasks were: Kristina Toutanova and Hua Wu (Program Committee Chairs); David Yarowsky (Local Arrangements Chair); Jill Burstein and Lluís Màrquez (Workshop Chairs); Alex Fraser and Yang Liu (Tutorial Chairs), Alexander Koller and Miyao Yusuke (Publication Chairs); Ekaterina Kochmar, Annie Louis, and Svitlana Volkova (Student Research Workshop Chairs); Bill Byrne and Jordan Boyd-Graber (Faculty Advisors for the Student Workshop Chairs); Kalina Bontcheva and Zhu Jingbo (Demonstration Chairs); and Jason Riesa (Publicity Chair). The Program Chairs were also instrumental in selecting our outstanding invited speakers: Corinna Cortez (Google) and Zoran Popovic (University of Washington).

I am also grateful to our sponsors for their generous contributions, without which the conference would become prohibitively expensive for the next generation of computational linguistic researchers: Baidu (Platinum Sponsor); Bloomberg, Google, Microsoft, Nuance, and Yahoo Labs (Gold Sponsors); Information Sciences Institute and Xerox Research Center Europe (Silver Sponsors); Brandeis University, Facebook, and Yandex (Bronze Sponsors); and IBM Research and the University of Washington (Supporters).

Finally, I would like to express my appreciation to the area chairs, workshop organizers, tutorial presenters, and reviewers. And to all the ACL'2014 attendees. This is *your* conference; make the most of it!

Welcome to ACL'2014!

The ACL'2014 General Chair
Daniel Marcu, Information Sciences Institute, USC

Preface: Program Committee Co-Chairs

Welcome to the 2014 Conference of the Association for Computational Linguistics! This year ACL received 572 long paper submissions and 551 short paper submissions. Of the long papers, 146 were accepted for presentation at ACL — 95 as oral, and 51 as poster presentations. 139 short papers were accepted — 51 as oral, and 88 as poster presentations.

The submissions were reviewed under different categories and using different review forms for empirical/data-driven, theoretical, applications/tools, resources/evaluation, and survey papers. For the short papers we additionally used a negative results category and were glad to see that the community is becoming more open to enabling the publication of useful negative results.

Based on feedback from prior years, this year we organized the posters in two large poster sessions to accommodate the growing number of high-quality submissions accepted in poster presentation format. We hope attendees and authors will benefit from this additional time to present and discuss ideas. Another innovation we are experimenting with this year is to optimize the conference schedule based on feedback from attendees on the talks they would like to see. We collected attendee responses using a scheduling survey developed with the help of David Yarowsky and Svitlana Volkova (thanks to the 338 volunteers who completed the survey!), and we optimized the conference schedule to assign popular sessions to large conference rooms, and to reduce the chance that two talks that an attendee is interested in are scheduled at the same time. Additionally, as in NAACL 2013, all talks will be recorded and made available for future viewing.

ACL 2014 will have two distinguished invited speakers. Corinna Cortes (Head of Google Research, NY) and Zoran Popović (Director of Center for Game Science, University of Washington).

There are many individuals to thank for their contributions to ACL 2014. We would like to thank the thirty three area chairs for their hard work on recruiting reviewers, leading the discussion process, and carefully ranking the submissions. We would like to thank Mark Dredze for developing and sharing a reviewer assignment tool, that was used at ACL this year. It was applied to ACL reviewing with the help of Jiang Guo and the area chairs who provided feedback at several stages of the process. We would also like to thank the seven hundred and seventy nine reviewers and seventy two secondary reviewers on whose efforts we depend to select high-quality and timely scientific work. This year we specifically acknowledged around 14% of the reviewers who went the extra mile and provided extremely helpful to the area chairs and authors reviews (their names are marked with a * in the organization section of the proceedings). The ACL coordinating committee members, including Dragomir Radev, Jian Su, Graeme Hirst, Hal Daumé III, Chris Callison-Burch, and Haifeng Wang were very helpful on various issues relating to the organization. We would like to thank the prior conference chairs Jason Eisner, Hal Daumé, Lucy Vanderwende, Jian Su, Rada Mihalcea, Marius Pasca, Pascale Fung, and Massimo Poesio for their advice. We are very grateful for the guidance and support of the general chair Daniel Marcu, to the ACL Business Manager Priscilla Rasmussen who knew practically everything, to the local chair David Yarowsky, the publication chairs Yusuke Miyao and Alexander Koller, and to Matt Post who stepped in to handle the conference handbook. We would also like to thank Jiang Guo who helped with reviewer assignment and numerous other tasks. Rich Gerber from Softconf was extremely responsive to all of our requests, and we are grateful for that.

We hope you will enjoy ACL 2014 in Baltimore!

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Invited Talk: Learning Ensembles of Structured Prediction Rules

Corinna Cortes

Google Research, New York

Abstract

We present a series of algorithms with theoretical guarantees for learning accurate ensembles of several structured prediction rules for which no prior knowledge is assumed. This includes a number of randomized and deterministic algorithms devised by converting on-line learning algorithms to batch ones, and a boosting-style algorithm applicable in the context of structured prediction with a large number of labels. We also report the results of extensive experiments with these algorithms.

This is joint work with Vitaly Kuznetsov, NYU, and Mehryar Mohri, NYU/Google Research.

Biography

Corinna Cortes is the Head of Google Research, NY, where she is working on a broad range of theoretical and applied large-scale machine learning problems. Prior to Google, Corinna spent more than ten years at AT&T Labs - Research, formerly AT&T Bell Labs, where she held a distinguished research position. Corinna's research work is well-known in particular for her contributions to the theoretical foundations of support vector machines (SVMs), for which she jointly with Vladimir Vapnik received the 2008 Paris Kanellakis Theory and Practice Award, and her work on data-mining in very large data sets for which she was awarded the AT&T Science and Technology Medal in the year 2000. Corinna received her MS degree in Physics from University of Copenhagen and joined AT&T Bell Labs as a researcher in 1989. She received her Ph.D. in computer science from the University of Rochester in 1993. Corinna is also a competitive runner.

Invited Talk: Text Generation for Infinitely Adaptable Curricula

Zoran Popović

Center for Game Science, Computer Science & Engineering, University of Washington

Abstract

Recent studies show that to achieve mastery of a topic by 95% of the student population, some students need ten times more learning content than is available in current curricula. At issue is not just increased volume, but the need for a highly differentiated content specialized to promote optimal learning for each unique learner. To address this synthesis problem we have developed a generative platform capable of dynamically varying content based on the individual student needs. This approach recently achieved 93% mastery of a key algebra concept even for primary school students in three state-wide challenges. In this talk I will describe our work on extending the platform to enable students to solve all word problems in high-school within their preferred context (e.g. sci-fi, medieval, Harry Potter), as well as to automatically generate adaptive learning progressions for reading comprehension curricula in middle school.

Biography

Zoran Popović is a Director of Center for Game Science at University of Washington and founder of Engaged Learning. Trained as a computer scientist his research focus is on creating interactive engaging environments for learning and scientific discovery. His laboratory created Foldit, a biochemistry game that produced three Nature publications in just two years, an award-winning math learning games played by over five million learners worldwide. He is currently focusing on engaging methods that can rapidly develop experts in arbitrary domains with particular focus on revolutionizing K-12 math education. He has recently founded Engaged Learning to apply his work on generative adaptation to any curricula towards the goal of achieving school mastery by 95% of students. His contributions to the field of interactive computer graphics have been recognized by a number of awards including the NSF CAREER Award, Alfred P. Sloan Fellowship and ACM SIGGRAPH Significant New Researcher Award.

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Conference Program

Sunday, June 22, 2014

7:30–18:00 Registration

7:30–9:00 Breakfast

9:00–12:30 Morning Tutorial

Session T1: Gaussian Processes for Natural Language Processing

Session T2: Scalable Large-Margin Structured Learning: Theory and Algorithms

Session T3: Semantics for Large-Scale Multimedia: New Challenges for NLP

Session T4: Wikification and Beyond: The Challenges of Entity and Concept Grounding

12:30–14:00 Lunch break

14:00–17:30 Afternoon Tutorial

Session T5: New Directions in Vector Space Models of Meaning

Session T6: Structured Belief Propagation for NLP

Session T7: Semantics, Discourse and Statistical Machine Translation

Session T8: Syntactic Processing Using Global Discriminative Learning and Beam-Search Decoding

18:00–21:00 Welcome Reception

Monday, June 23, 2014

7:30–18:00 Registration

7:30–9:00 Breakfast

8:55–9:00 Opening session

9:00–9:40 President talk

9:40–10:10 Coffee break

Session 1A: Discourse, Dialogue, Coreference and Pragmatics

10:10–10:35 *Representation Learning for Text-level Discourse Parsing*
Yangfeng Ji and Jacob Eisenstein

10:35–11:00 *Text-level Discourse Dependency Parsing*
Sujian Li, Liang Wang, Ziqiang Cao and Wenjie Li

11:00–11:25 *Discovering Latent Structure in Task-Oriented Dialogues*
Ke Zhai and Jason D Williams

11:25–11:50 *Learning Structured Perceptrons for Coreference Resolution with Latent Antecedents and Non-local Features*
Anders Björkelund and Jonas Kuhn

Monday, June 23, 2014 (continued)

Session 1B: Semantics I

- 10:10–10:35 *Multilingual Models for Compositional Distributed Semantics*
Karl Moritz Hermann and Phil Blunsom
- 10:35–11:00 *Simple Negation Scope Resolution through Deep Parsing: A Semantic Solution to a Semantic Problem*
Woodley Packard, Emily M. Bender, Jonathon Read, Stephan Oepen and Rebecca Dridan
- 11:00–11:25 *Logical Inference on Dependency-based Compositional Semantics*
Ran Tian, Yusuke Miyao and Takuya Matsuzaki
- 11:25–11:50 *A practical and linguistically-motivated approach to compositional distributional semantics*
Denis Paperno, Nghia The Pham and Marco Baroni

Session 1C: Machine Translation I

- 10:10–10:35 *Lattice Desegmentation for Statistical Machine Translation*
Mohammad Salameh, Colin Cherry and Grzegorz Kondrak
- 10:35–11:00 *Bilingually-constrained Phrase Embeddings for Machine Translation*
Jiajun Zhang, Shujie Liu, Mu Li, Ming Zhou and Chengqing Zong
- 11:00–11:25 *Learning New Semi-Supervised Deep Auto-encoder Features for Statistical Machine Translation*
Shixiang Lu, Zhenbiao Chen and Bo Xu
- 11:25–11:50 *Learning Topic Representation for SMT with Neural Networks*
Lei Cui, Dongdong Zhang, Shujie Liu, Qiming Chen, Mu Li, Ming Zhou and Muyun Yang

Monday, June 23, 2014 (continued)

Session 1D: Syntax, Parsing and Tagging I

11:00–11:25 *Tagging The Web: Building A Robust Web Tagger with Neural Network*
Ji Ma, Yue Zhang and Jingbo Zhu

Session 1E: NLP for the Web and Social Media I

10:10–10:35 *Unsupervised Solution Post Identification from Discussion Forums*
Deepak P and Karthik Visweswariah

10:35–11:00 *Weakly Supervised User Profile Extraction from Twitter*
Jiwei Li, Alan Ritter and Eduard Hovy

11:00–11:25 *The effect of wording on message propagation: Topic- and author-controlled natural experiments on Twitter*
Chenhao Tan, Lillian Lee and Bo Pang

11:25–11:50 *Inferring User Political Preferences from Streaming Communications*
Svitlana Volkova, Glen Coppersmith and Benjamin Van Durme

11:50–13:20 Lunch break; Student Lunch

Session 2A: Syntax, Parsing and Tagging II

13:20–13:45 *Steps to Excellence: Simple Inference with Refined Scoring of Dependency Trees*
Yuan Zhang, Tao Lei, Regina Barzilay, Tommi Jaakkola and Amir Globerson

13:45–14:10 *Parser, Better, Faster GPU Parsing*
David Hall, Taylor Berg-Kirkpatrick and Dan Klein

14:10–14:35 *Shift-Reduce CCG Parsing with a Dependency Model*
Wenduan Xu, Stephen Clark and Yue Zhang

14:35–15:00 *Less Grammar, More Features*
David Hall, Greg Durrett and Dan Klein

Monday, June 23, 2014 (continued)

Session 2B: Semantics II

- 13:20–13:45 *Don't count, predict! A systematic comparison of context-counting vs. context-predicting semantic vectors*
Marco Baroni, Georgiana Dinu and Germán Kruszewski
- 13:45–14:10 *Metaphor Detection with Cross-Lingual Model Transfer*
Yulia Tsvetkov, Leonid Boytsov, Anatole Gershman, Eric Nyberg and Chris Dyer
- 14:10–14:35 *Learning Word Sense Distributions, Detecting Unattested Senses and Identifying Novel Senses Using Topic Models*
Jey Han Lau, Paul Cook, Diana McCarthy, Spandana Gella and Timothy Baldwin
- 14:35–15:00 *Learning to Automatically Solve Algebra Word Problems*
Nate Kushman, Luke Zettlemoyer, Regina Barzilay and Yoav Artzi

Session 2C: Word Segmentation and POS Tagging

- 13:45–14:10 *Modelling function words improves unsupervised word segmentation*
Mark Johnson, Anne Christophe, Emmanuel Dupoux and Katherine Demuth
- 14:35–15:00 *Max-Margin Tensor Neural Network for Chinese Word Segmentation*
Wenzhe Pei, Tao Ge and Baobao Chang

Session 2D: SRW

Session 2E: Sentiment Analysis I

- 13:20–13:45 *An Empirical Study on the Effect of Negation Words on Sentiment*
Xiaodan Zhu, Hongyu Guo, Saif Mohammad and Svetlana Kiritchenko
- 13:45–14:10 *Extracting Opinion Targets and Opinion Words from Online Reviews with Graph Co-ranking*
Kang Liu, Liheng Xu and Jun Zhao
- 14:10–14:35 *Context-aware Learning for Sentence-level Sentiment Analysis with Posterior Regularization*
Bishan Yang and Claire Cardie
- 14:35–15:00 *Product Feature Mining: Semantic Clues versus Syntactic Constituents*
Liheng Xu, Kang Liu, Siwei Lai and Jun Zhao

Monday, June 23, 2014 (continued)

15:00–15:30 Coffee break

Session 3A: Topic Modeling

15:30–15:55 *Aspect Extraction with Automated Prior Knowledge Learning*
Zhiyuan Chen, Arjun Mukherjee and Bing Liu

15:55–16:20 *Anchors Regularized: Adding Robustness and Extensibility to Scalable Topic-Modeling Algorithms*
Thang Nguyen, Yuening Hu and Jordan Boyd-Graber

16:20–16:45 *A Bayesian Mixed Effects Model of Literary Character*
David Bamman, Ted Underwood and Noah A. Smith

Session 3B: Information Extraction I

15:30–15:55 *Collective Tweet Wikification based on Semi-supervised Graph Regularization*
Hongzhao Huang, Yunbo Cao, Xiaojiang Huang, Heng Ji and Chin-Yew Lin

15:55–16:20 *Zero-shot Entity Extraction from Web Pages*
Panupong Pasupat and Percy Liang

16:20–16:45 *Incremental Joint Extraction of Entity Mentions and Relations*
Qi Li and Heng Ji

Session 3C: Generation

15:30–15:55 *That's Not What I Meant! Using Parsers to Avoid Structural Ambiguities in Generated Text*
Manjuan Duan and Michael White

15:55–16:20 *Surface Realisation from Knowledge-Bases*
Bikash Gyawali and Claire Gardent

16:20–16:45 *Hybrid Simplification using Deep Semantics and Machine Translation*
Shashi Narayan and Claire Gardent

Monday, June 23, 2014 (continued)

Session 3D: Syntax, Parsing and Tagging III

15:55–16:20 *Grammatical Relations in Chinese: GB-Ground Extraction and Data-Driven Parsing*
Weiwei Sun, Yantao Du, Xin Kou, Shuoyang Ding and Xiaojun Wan

16:20–16:45 *Ambiguity-aware Ensemble Training for Semi-supervised Dependency Parsing*
Zhenghua Li, Min Zhang and Wenliang Chen

Session 3E: Language Resources and Evaluation I

15:30–15:55 *A Robust Approach to Aligning Heterogeneous Lexical Resources*
Mohammad Taher Pilehvar and Roberto Navigli

15:55–16:20 *Predicting the relevance of distributional semantic similarity with contextual information*
Philippe Muller, Cécile Fabre and Clémentine Adam

16:45–17:00 Break

17:00–18:00 Invited talk I: Corinna Cortes

17:00–18:00 *Learning Ensembles of Structured Prediction Rules*
Corinna Cortes, Vitaly Kuznetsov and Mehryar Mohri

Oral Sessions for Student Research Workshop Posters

18:50–21:30 Poster and Dinner Session I: TACL Papers, Long Papers, Short Papers, Student Research Workshop; Demonstrations

Interpretable Semantic Vectors from a Joint Model of Brain- and Text- Based Meaning
Alona Fyshe, Partha P. Talukdar, Brian Murphy and Tom M. Mitchell

Single-Agent vs. Multi-Agent Techniques for Concurrent Reinforcement Learning of Negotiation Dialogue Policies
Kallirroi Georgila, Claire Nelson and David Traum

A Linear-Time Bottom-Up Discourse Parser with Constraints and Post-Editing
Vanessa Wei Feng and Graeme Hirst

Negation Focus Identification with Contextual Discourse Information
Bowe Zou, Guodong Zhou and Qiaoming Zhu

Monday, June 23, 2014 (continued)

New Word Detection for Sentiment Analysis

Minlie Huang, Borui Ye, Yichen Wang, Haiqiang Chen, Junjun Cheng and Xiaoyan Zhu

ReNew: A Semi-Supervised Framework for Generating Domain-Specific Lexicons and Sentiment Analysis

Zhe Zhang and Munindar P. Singh

A Decision-Theoretic Approach to Natural Language Generation

Nathan McKinley and Soumya Ray

Generating Code-switched Text for Lexical Learning

Igor Labutov and Hod Lipson

Omni-word Feature and Soft Constraint for Chinese Relation Extraction

Yanping Chen, Qinghua Zheng and Wei Zhang

Bilingual Active Learning for Relation Classification via Pseudo Parallel Corpora

Longhua Qian, Haotian Hui, Ya'nan Hu, Guodong Zhou and Qiaoming Zhu

Learning Soft Linear Constraints with Application to Citation Field Extraction

Sam Anzaroot, Alexandre Passos, David Belanger and Andrew McCallum

A Study of Concept-based Weighting Regularization for Medical Records Search

Yue Wang, Xitong Liu and Hui Fang

Learning to Predict Distributions of Words Across Domains

Danushka Bollegala, David Weir and John Carroll

How to make words with vectors: Phrase generation in distributional semantics

Georgiana Dinu and Marco Baroni

Vector space semantics with frequency-driven motifs

Shashank Srivastava and Eduard Hovy

Lexical Inference over Multi-Word Predicates: A Distributional Approach

Omri Abend, Shay B. Cohen and Mark Steedman

Monday, June 23, 2014 (continued)

A Convolutional Neural Network for Modelling Sentences

Nal Kalchbrenner, Edward Grefenstette and Phil Blunsom

Online Learning in Tensor Space

Yuan Cao and Sanjeev Khudanpur

Graph-based Semi-Supervised Learning of Translation Models from Monolingual Data

Avneesh Saluja, Hany Hassan, Kristina Toutanova and Chris Quirk

Using Discourse Structure Improves Machine Translation Evaluation

Francisco Guzmán, Shafiq Joty, Lluís Màrquez and Preslav Nakov

Learning Continuous Phrase Representations for Translation Modeling

Jianfeng Gao, Xiaodong He, Wen-tau Yih and Li Deng

Adaptive Quality Estimation for Machine Translation

Marco Turchi, Antonios Anastasopoulos, José G. C. de Souza and Matteo Negri

Learning Grounded Meaning Representations with Autoencoders

Carina Silberer and Mirella Lapata

Joint POS Tagging and Transition-based Constituent Parsing in Chinese with Non-local Features

Zhiguo Wang and Nianwen Xue

Strategies for Contiguous Multiword Expression Analysis and Dependency Parsing

Marie Candito and Matthieu Constant

Correcting Preposition Errors in Learner English Using Error Case Frames and Feedback Messages

Ryo Nagata, Mikko Vilenius and Edward Whittaker

Tuesday, June 24, 2014

7:30–18:00 Registration

7:30–9:00 Breakfast

9:00–10:00 Invited talk II: Zoran Popović

9:00–10:00 *Text Generation for Infinitely Adaptable Curricula*
Zoran Popović

10:00–10:30 Coffee break

Session 4A: Machine Learning for NLP

10:30–10:55 *Kneser-Ney Smoothing on Expected Counts*
Hui Zhang and David Chiang

10:55–11:20 *Robust Entity Clustering via Phylogenetic Inference*
Nicholas Andrews, Jason Eisner and Mark Dredze

11:20–11:45 *Linguistic Structured Sparsity in Text Categorization*
Dani Yogatama and Noah A. Smith

11:45–12:10 *Perplexity on Reduced Corpora*
Hayato Kobayashi

Tuesday, June 24, 2014 (continued)

Session 4B: Information Extraction II

- 10:30–10:55 *Robust Domain Adaptation for Relation Extraction via Clustering Consistency*
Minh Luan Nguyen, Ivor W. Tsang, Kian Ming A. Chai and Hai Leong Chieu
- 10:55–11:20 *Encoding Relation Requirements for Relation Extraction via Joint Inference*
Liwei Chen, Yansong Feng, Songfang Huang, Yong Qin and Dongyan Zhao
- 11:20–11:45 *Medical Relation Extraction with Manifold Models*
Chang Wang and James Fan
- 11:45–12:10 *Distant Supervision for Relation Extraction with Matrix Completion*
Miao Fan, Deli Zhao, Qiang Zhou, Zhiyuan Liu, Thomas Fang Zheng and Edward Y. Chang

Session 4C: Machine Translation II

- 10:30–10:55 *Enhancing Grammatical Cohesion: Generating Transitional Expressions for SMT*
Mei Tu, Yu Zhou and Chengqing Zong
- 10:55–11:20 *Adaptive HTER Estimation for Document-Specific MT Post-Editing*
Fei Huang, Jian-Ming Xu, Abraham Ittycheriah and Salim Roukos
- 11:20–11:45 *Translation Assistance by Translation of L1 Fragments in an L2 Context*
Maarten van Gompel and Antal van den Bosch
- 11:45–12:10 *Response-based Learning for Grounded Machine Translation*
Stefan Riezler, Patrick Simianer and Carolin Haas

Tuesday, June 24, 2014 (continued)

Session 4D: Summarization

- 10:30–10:55 *Modelling Events through Memory-based, Open-IE Patterns for Abstractive Summarization*
Daniele Pighin, Marco Cornolti, Enrique Alfonseca and Katja Filippova
- 10:55–11:20 *Hierarchical Summarization: Scaling Up Multi-Document Summarization*
Janara Christensen, Stephen Soderland, Gagan Bansal and Mausam
- 11:20–11:45 *Query-Chain Focused Summarization*
Tal Baumel, Raphael Cohen and Michael Elhadad
- 11:45–12:10 *Exploiting Timelines to Enhance Multi-document Summarization*
Jun-Ping Ng, Yan Chen, Min-Yen Kan and Zhoujun Li

Session 4E: Language Resources and Evaluation II

- 10:55–11:20 *A chance-corrected measure of inter-annotator agreement for syntax*
Arne Skjærholt
- 11:20–11:45 *Two Is Bigger (and Better) Than One: the Wikipedia Bitaxonomy Project*
Tiziano Flati, Daniele Vannella, Tommaso Pasini and Roberto Navigli
- 12:10–13:30 Lunch break

Session 5A: Question Answering

- 13:30–13:55 *Information Extraction over Structured Data: Question Answering with Freebase*
Xuchen Yao and Benjamin Van Durme
- 13:55–14:20 *Knowledge-Based Question Answering as Machine Translation*
Junwei Bao, Nan Duan, Ming Zhou and Tiejun Zhao
- 14:20–14:45 *Discourse Complements Lexical Semantics for Non-factoid Answer Reranking*
Peter Jansen, Mihai Surdeanu and Peter Clark

Tuesday, June 24, 2014 (continued)

Session 5B: Information Extraction III

13:30–13:55 *Toward Future Scenario Generation: Extracting Event Causality Exploiting Semantic Relation, Context, and Association Features*

Chikara Hashimoto, Kentaro Torisawa, Julien Kloetzer, Motoki Sano, István Varga, Jong-Hoon Oh and Yutaka Kidawara

13:55–14:20 *Cross-narrative Temporal Ordering of Medical Events*

Preethi Raghavan, Eric Fosler-Lussier, Noémie Elhadad and Albert M. Lai

Language-Aware Truth Assessment of Fact Candidates

Ndapandula Nakashole and Tom M. Mitchell

Session 5C: Lexical Semantics and Ontology I

13:30–13:55 *That's sick dude!: Automatic identification of word sense change across different timescales*

Sunny Mitra, Ritwik Mitra, Martin Riedl, Chris Biemann, Animesh Mukherjee and Pawan Goyal

13:55–14:20 *A Step-wise Usage-based Method for Inducing Polysemy-aware Verb Classes*

Daisuke Kawahara, Daniel W. Peterson and Martha Palmer

14:20–14:45 *Structured Learning for Taxonomy Induction with Belief Propagation*

Mohit Bansal, David Burkett, Gerard de Melo and Dan Klein

Session 5D: Syntax, Parsing and Tagging IV

13:30–13:55 *A Provably Correct Learning Algorithm for Latent-Variable PCFGs*

Shay B. Cohen and Michael Collins

13:55–14:20 *Spectral Unsupervised Parsing with Additive Tree Metrics*

Ankur P. Parikh, Shay B. Cohen and Eric P. Xing

Tuesday, June 24, 2014 (continued)

Session 5E: Cognitive Modeling and Psycholinguistics

13:30–13:55 *Weak semantic context helps phonetic learning in a model of infant language acquisition*
Stella Frank, Naomi H. Feldman and Sharon Goldwater

13:55–14:20 *Bootstrapping into Filler-Gap: An Acquisition Story*
Marten van Schijndel and Micha Elsner

14:20–14:45 *Nonparametric Learning of Phonological Constraints in Optimality Theory*
Gabriel Doyle, Klinton Bicknell and Roger Levy

14:45–15:15 Coffee break

Session 6A: Machine Translation III

Session 6B: Lexical Semantics and Ontology II

Session 6C: Generation/Summarization/Dialogue

Session 6D: NLP Applications and NLP Enabled Technology I

Session 6E: Language Resources and Evaluation III

16:50–19:20 Poster and Dinner Session II: Long Papers, Short Papers and Demonstrations

Active Learning with Efficient Feature Weighting Methods for Improving Data Quality and Classification Accuracy

Justin Martineau, Lu Chen, Doreen Cheng and Amit Sheth

Political Ideology Detection Using Recursive Neural Networks

Mohit Iyyer, Peter Enns, Jordan Boyd-Graber and Philip Resnik

A Unified Model for Soft Linguistic Reordering Constraints in Statistical Machine Translation

Junhui Li, Yuval Marton, Philip Resnik and Hal Daumé III

Are Two Heads Better than One? Crowdsourced Translation via a Two-Step Collaboration of Non-Professional Translators and Editors

Rui Yan, Mingkun Gao, Ellie Pavlick and Chris Callison-Burch

Tuesday, June 24, 2014 (continued)

A Generalized Language Model as the Combination of Skipped n-grams and Modified Kneser Ney Smoothing

Rene Pickhardt, Thomas Gottron, Martin Körner, Paul Georg Wagner, Till Speicher and Steffen Staab

A Semiparametric Gaussian Copula Regression Model for Predicting Financial Risks from Earnings Calls

William Yang Wang and Zhenhao Hua

Polylingual Tree-Based Topic Models for Translation Domain Adaptation

Yuening Hu, Ke Zhai, Vladimir Eidelman and Jordan Boyd-Graber

Low-Resource Semantic Role Labeling

Matthew R. Gormley, Margaret Mitchell, Benjamin Van Durme and Mark Dredze

Joint Syntactic and Semantic Parsing with Combinatory Categorical Grammar

Jayant Krishnamurthy and Tom M. Mitchell

Learning Semantic Hierarchies via Word Embeddings

Ruiji Fu, Jiang Guo, Bing Qin, Wanxiang Che, Haifeng Wang and Ting Liu

Probabilistic Soft Logic for Semantic Textual Similarity

Islam Beltagy, Katrin Erk and Raymond Mooney

Abstractive Summarization of Spoken and Written Conversations Based on Phrasal Queries

Yashar Mehdad, Giuseppe Carenini and Raymond T. Ng

Comparing Multi-label Classification with Reinforcement Learning for Summarisation of Time-series Data

Dimitra Gkatzia, Helen Hastie and Oliver Lemon

Approximation Strategies for Multi-Structure Sentence Compression

Kapil Thadani

Opinion Mining on YouTube

Aliaksei Severyn, Alessandro Moschitti, Olga Uryupina, Barbara Plank and Katja Filipova

Automatic Keyphrase Extraction: A Survey of the State of the Art

Kazi Saidul Hasan and Vincent Ng

Tuesday, June 24, 2014 (continued)

Pattern Dictionary of English Prepositions

Ken Litkowski

Looking at Unbalanced Specialized Comparable Corpora for Bilingual Lexicon Extraction

Emmanuel Morin and Amir Hazem

Validating and Extending Semantic Knowledge Bases using Video Games with a Purpose

Daniele Vannella, David Jurgens, Daniele Scarfini, Domenico Toscani and Roberto Navigli

Shallow Analysis Based Assessment of Syntactic Complexity for Automated Speech Scoring

Suma Bhat, Huichao Xue and Su-Youn Yoon

Can You Repeat That? Using Word Repetition to Improve Spoken Term Detection

Jonathan Wintrobe and Sanjeev Khudanpur

Character-Level Chinese Dependency Parsing

Meishan Zhang, Yue Zhang, Wanxiang Che and Ting Liu

Unsupervised Dependency Parsing with Transferring Distribution via Parallel Guidance and Entropy Regularization

Xuezhe Ma and Fei Xia

Unsupervised Morphology-Based Vocabulary Expansion

Mohammad Sadegh Rasooli, Thomas Lippincott, Nizar Habash and Owen Rambow

Toward Better Chinese Word Segmentation for SMT via Bilingual Constraints

Xiaodong Zeng, Lidia S. Chao, Derek F. Wong, Isabel Trancoso and Liang Tian

19:30–22:00 Social at the National Aquarium in Baltimore

Wednesday, June 25, 2014

7:30–18:00 Registration

7:30–9:00 Breakfast

Best paper session

9:00–9:30 *Fast and Robust Neural Network Joint Models for Statistical Machine Translation*
Jacob Devlin, Rabih Zbib, Zhongqiang Huang, Thomas Lamar, Richard Schwartz and John Makhoul

9:30–10:00 *Low-Rank Tensors for Scoring Dependency Structures*
Tao Lei, Yu Xin, Yuan Zhang, Regina Barzilay and Tommi Jaakkola

10:15–10:45 Coffee break

Session 7A: Multimodal NLP/ Lexical Semantics

11:10–11:35 *CoSimRank: A Flexible & Efficient Graph-Theoretic Similarity Measure*
Sascha Rothe and Hinrich Schütze

11:35–12:00 *Is this a wampimuk? Cross-modal mapping between distributional semantics and the visual world*
Angeliki Lazaridou, Elia Bruni and Marco Baroni

Session 7B: Semantics III

10:45–11:10 *Semantic Parsing via Paraphrasing*
Jonathan Berant and Percy Liang

11:10–11:35 *A Discriminative Graph-Based Parser for the Abstract Meaning Representation*
Jeffrey Flanigan, Sam Thomson, Jaime Carbonell, Chris Dyer and Noah A. Smith

11:35–12:00 *Context-dependent Semantic Parsing for Time Expressions*
Kenton Lee, Yoav Artzi, Jesse Dodge and Luke Zettlemoyer

12:00–12:25 *Semantic Frame Identification with Distributed Word Representations*
Karl Moritz Hermann, Dipanjan Das, Jason Weston and Kuzman Ganchev

Wednesday, June 25, 2014 (continued)

Session 7C: Machine Translation IV

- 10:45–11:10 *A Sense-Based Translation Model for Statistical Machine Translation*
Deyi Xiong and Min Zhang
- 11:10–11:35 *Recurrent Neural Networks for Word Alignment Model*
Akihiro Tamura, Taro Watanabe and Eiichiro Sumita
- 11:35–12:00 *A Constrained Viterbi Relaxation for Bidirectional Word Alignment*
Yin-Wen Chang, Alexander M. Rush, John DeNero and Michael Collins
- 12:00–12:25 *A Recursive Recurrent Neural Network for Statistical Machine Translation*
Shujie Liu, Nan Yang, Mu Li and Ming Zhou

Session 7D: NLP Applications and NLP Enabled Technology II

- 10:45–11:10 *Predicting Instructor’s Intervention in MOOC forums*
Snigdha Chaturvedi, Dan Goldwasser and Hal Daumé III
- 11:10–11:35 *A Joint Graph Model for Pinyin-to-Chinese Conversion with Typo Correction*
Zhongye Jia and Hai Zhao
- 11:35–12:00 *Smart Selection*
Patrick Pantel, Michael Gamon and Ariel Fuxman
- 12:00–12:25 *Modeling Prompt Adherence in Student Essays*
Isaac Persing and Vincent Ng

Wednesday, June 25, 2014 (continued)

Session 7E: Sentiment Analysis II

- 11:10–11:35 *ConnotationWordNet: Learning Connotation over the Word+Sense Network*
Jun Seok Kang, Song Feng, Leman Akoglu and Yejin Choi
- 11:35–12:00 *Learning Sentiment-Specific Word Embedding for Twitter Sentiment Classification*
Duyu Tang, Furu Wei, Nan Yang, Ming Zhou, Ting Liu and Bing Qin
- 12:00–12:25 *Towards a General Rule for Identifying Deceptive Opinion Spam*
Jiwei Li, Myle Ott, Claire Cardie and Eduard Hovy
- 12:25–13:30 Lunch break
- 13:30–15:00 ACL Business Meeting

Session 8A: NLP for the Web and Social Media II

Session 8B: Semantics/Information Extraction

Session 8C: Machine Translation V

Session 8D: Syntax, Parsing and Tagging V

Session 8E: Multilinguality and Multimodal NLP

- 16:30–17:00 Coffee break
- 17:00–18:30 Lifetime Achievement Award
- 18:30–19:00 Closing Session

