Jonathan K. Kummerfeld

Name: jkummerf at University: umich.edu

Education

PhD in Computer Science 2010–2016
University of California, Berkeley, Adviser: Dan Klein
Thesis: "Algorithms for Identifying Syntactic Errors and Parsing with Graph Structured Output"

Bachelor of Science (Advanced) (Honours) Class I with University Medal 2006–2009
University of Sydney, Adviser: James Curran
Thesis: "Adaptive Supertagging for Faster Parsing"

Publications

Computational Linguistics

An Empirical Analysis of Optimization for Max-Margin NLP
J. K. Kummerfeld, T. Berg-Kirkpatrick, and D. Klein
Empirical Methods in Natural Language Processing, 2015

Error-Driven Analysis of Challenges in Coreference Resolution
J. K. Kummerfeld and D. Klein
Empirical Methods in Natural Language Processing, 2013

An Empirical Examination of Challenges in Chinese Parsing
J. K. Kummerfeld, D. Tse, J. R. Curran, and D. Klein
Association for Computational Linguistics, 2013

Parser Showdown at the Wall Street Corral: An Empirical Investigation of Error Types in Parser Output
J. K. Kummerfeld, D. Hall, J. R. Curran, and D. Klein
Empirical Methods in Natural Language Processing, 2012

Robust Conversion of CCG Derivations to Phrase Structure Trees
J. K. Kummerfeld, D. Klein, and J. R. Curran
Association for Computational Linguistics, 2012

Mention Detection: Heuristics for the OntoNotes annotations
J. K. Kummerfeld, M. Bansal, D. Burkett, and D. Klein
Conference on Natural Language Learning, 2011

Faster Parsing by Supertagger Adaptation
J. K. Kummerfeld, J. Roesner, T. Dawborn, J. Haggerty, J. Curran, and S. Clarke
Association for Computational Linguistics, 2010

Morphological Analysis Can Improve a CCG Parser for English
M. Honnibal, J. K. Kummerfeld, and J. R. Curran
International Conference on Computational Linguistics, 2010

Faster Parsing and Supertagging Model Estimation
J. K. Kummerfeld, J. Roesner, and J. R. Curran
Australasian Language Technology Association, 2009

Classification of Verb Particle Constructions with the Google Web1T Corpus
J. K. Kummerfeld and J. R. Curran
Australasian Language Technology Association, 2008

Physical Sciences

High-velocity Clouds in the Galactic All Sky Survey. I. Catalog
V. A. Moss, N. M. McClure-Griffiths, T. Murphy, D. J. Pisano, J. K. Kummerfeld, and

J. R. Curran
The Astrophysical Journal Supplement Series, 2013, 209:12

Spatiotemporal Hierarchy of Relaxation Events, Dynamical Heterogeneities, and Structural Reorganization in a Supercooled Liquid
R. Candelier, A. Widmer-Cooper, J. K. Kummerfeld, O. Dauchot, G. Biroli, P. Harrowell, and D. R Reichman
Physical Review Letters, 2010, 105:135702

The Densest Packing of AB Binary Hard-Sphere Homogeneous Compounds across all Size Ratios
J. K. Kummerfeld, T. S. Hudson, and P. Harrowell
The Journal of Physical Chemistry B, 2008, 112:10773–10776

Employment	University of Michigan	September 2016 – Present

Postdoctoral Research Fellow in Computer Science Engineering.

Consultant
Clinc   January 2017 – Present
Technical adviser for product development.

Stealth startup   May 2015 – Present
Technical adviser for product development.

WriteLab   March 2014 – Present
Technical adviser for automatic linguistic cue identification.

Techbridge   September 2013 - May 2014
Development of the High School CS Curriculum.

Software Engineer – Intern
Google Research   May - August 2012
Mountain View Office, Natural Language Processing team.

Google   December 2007 - February 2008
Sydney Office, Infrastructure team.

Research Assistant, University of Sydney
School of Information Technologies, Prof. Kay   2010
School of Physics, Dr. Murphy   2010
School of Chemistry, Prof. Harrowell   2009
School of Letters, Art and Media, Dr. Bode   2008, 2009

Teaching and Talks   **Instructor**
Artificial Intelligence, Berkeley   Summer 2014
Co-taught upper division course – gave lectures, managed TAs, and prepared exams.
Evaluation: 6.3 / 7 (top 11% of UCB EECS instructors giving public results).

Invited Speaker
University of Macquarie, Centre for Language Technology   June 2016
Sydney Humans, Language, Technology MeetUp   May 2016
University of Sydney   May 2016
Information Sciences Institute, Natural Language Seminar   March 2016
CommonCrawl, Big Open Data Hackathon   May 2014

Lecturer
The Beauty and Joy of Computing, Berkeley   Summer 2014

Applied Natural Language Processing, Berkeley   Fall 2013
Proseminar in the Digital Humanities, Berkeley   Spring 2013

Teaching Assistant
Artificial Intelligence, Berkeley   Fall 2011
Held sections and office hours, prepared assignments, exams and sections.

Artificial Intelligence (Advanced), Sydney   Fall 2009
Held sections (third year elective Computer Science course).

Informatics (Advanced), Sydney   Fall 2009
Held sections and graded assignments (first year core Computer Science course).

High School Outreach
Australian Informatics Olympiad, ANU   2007–2010
Gave lectures, prepared exams and autograders, prepared labs.

National Computer Science School, Sydney   2007, 2008, 2010
Led a group of 16 high school students, who learned python and built a search engine.

Computational Linguistics Olympiads   2013, 2014, 2015, 2016
Set problems for the competition.

Awards and Honors	**Chair's Special Award** For services to the EECS department during student admissions and recruitment	2013
	Outstanding Graduate Student Instructor Award University wide award in recognition of exceptional achievements as a teacher	2011
	General Sir John Monash Award "Australia's most prestigious postgraduate scholarships"	2010 - 2013
	University Medal in Computer Science For outstanding results, awarded at the discretion of the university senate	2009

Professional Service	Graduate Admissions Committee, Berkeley Computer Science	2015
	President, Berkeley Computer Science Graduate Student Association	2012–2013

Program Committee

Transactions of the Association for Computational Linguistics (TACL)	2016
Association for Computational Linguistics (ACL)	2014 (secondary), 2017
North American Chapter of the ACL (NAACL)	2015, 2016
European Chapter of the ACL (EACL)	2016, 2017
Empirical Methods in Natural Language Processing (EMNLP)	2015, 2016
Association for the Advancement of Artificial Intelligence (AAAI)	2016
World Wide Web Conference (WWW)	2016
Conference on Natural Language Learning (CoNLL)	2016
Workshop on Ethics in NLP	2017
Student Research Workshop at NAACL	2015, 2016
Student Research Workshop at ACL	2014