

Dan Garrette

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EDUCATION

The University of Texas at Austin, Austin, TX

Ph.D., Computer Science (in progress)

Aug 2009 - Present

M.S., Computer Science

Aug 2009 - Dec 2011

Advisors: Jason Baldridge and Raymond Mooney

Illinois Wesleyan University, Bloomington, IL

B.S., Computer Science, *with Research Honors*

Aug 2003 - Apr 2006

Minor: Cognitive Science

(completed in 3 years)

PUBLICATIONS

- [1] [Dan Garrette](#), Chris Dyer, Jason Baldridge, and Noah A. Smith. “Weakly-Supervised Grammar-Informed Bayesian CCG Parser Learning”. In *Proc. of AAAI 2015*.
- [2] [Dan Garrette](#), Chris Dyer, Jason Baldridge, and Noah A. Smith. “Weakly-Supervised Bayesian Learning of a CCG Supertagger”. In *Proc. of CoNLL 2014*.
- [3] [Dan Garrette](#), Jason Mielens, and Jason Baldridge. “Real-World Semi-Supervised Learning of POS-Taggers for Low-Resource Languages”. In *Proc. of ACL 2013*.
- [4] [Dan Garrette](#) and Jason Baldridge. “Learning a Part-of-Speech Tagger from Two Hours of Annotation”. In *Proc. of NAACL 2013*.
★ **Best Talk Award** Finalist
- [5] [Dan Garrette](#), Katrin Erk, and Raymond Mooney. “A Formal Approach to Linking Logical Form and Vector-Space Lexical Semantics”. In: Harry Bunt, Johan Bos, and Stephen Pulman (eds) *Computing Meaning, Vol. 4*, 2013.
- [6] Islam Beltagy, Cuong Chau, Gemma Boleda, [Dan Garrette](#), Katrin Erk, and Raymond Mooney. “Montague Meets Markov: Deep Semantics with Probabilistic Logical Form”. In *Proc. of *SEM 2013*.
- [7] [Dan Garrette](#) and Jason Baldridge. “Type-Supervised Hidden Markov Models for Part-of-Speech Tagging with Incomplete Tag Dictionaries”. In *Proc. of EMNLP 2012*.
- [8] [Dan Garrette](#), Katrin Erk, and Raymond Mooney. “Integrating Logical Representations with Probabilistic Information using Markov Logic”. In *Proc. of the Ninth International Conference on Computational Semantics*, 2011.
- [9] [Dan Garrette](#) and Ewan Klein. “An Extensible Toolkit for Computational Semantics”. In *Proc. of the Eighth International Conference on Computational Semantics*, 2009.

SELECTED RESEARCH EXPERIENCE

The University of Texas at Austin

Research Assistant, Supervisor: Jason Baldridge

Aug 2011 - present

· Bayesian models of CCG parser induction from varieties of weak supervision.

Research Assistant, Supervisors: Katrin Erk and Ray Mooney

Aug 2009 - Aug 2011

· Unifying logical and distributional semantics for natural language representation and inference.

Google

Intern, Supervisors: Jiwoon Jeon and Hang Cui

May 2013 - Aug 2013

· Machine learning and natural language processing research related to Google News.

The University of Maryland Institute for Advanced Computer Studies

Research Assistant, Supervisor: Philip Resnik

May 2012 - Aug 2012

· Bayesian models of syntactic framing in political writing.

INVITED TALKS

Carnegie-Melon University. “Learning CCGs from Weak Supervision”. 2014.

SELECTED TEACHING EXPERIENCE

The University of Texas at Austin

Instructor, Natural Language Processing (CS 378 / LIN 353N) Fall 2013
· Upper-division undergraduate Computer Science and Linguistics course
· <http://www.dhgarrette.com/nlpclass/>

Undergraduate Research Advising
Bri Connelly 2014
Matthew Ebeweber 2014

The United States Peace Corps

Volunteer, Ghana, West Africa Jun 2006 - Feb 2007
· Taught math and English in an underperforming rural junior secondary school.
· Worked with staff members to develop their teaching techniques and avoid corporal punishment.
· Planned and performed HIV/AIDS presentations in rural communities and schools.

Illinois Wesleyan University

Teaching Assistant Aug 2004 - Apr 2006
· Courses on algorithms (in C and Haskell), abstract data structures (in C), and architecture.

HONORS AND AWARDS

Graduate

Best Talk Award Finalist, NAACL 2013
National Defense Science and Engineering Graduate Fellowship (NDSEG) - 2010-2013. Approx \$155,000
Student Travel Grant, EMNLP, 2012. \$800
Student Travel Grant, CoNLL, 2014. \$500

Undergraduate

Alumni Academic Scholarship
Jennings Music Scholarship
Upsilon Phi Epsilon - Computer Science Honor Society
Dean's List - 6 of 6 semesters

ACADEMIC SERVICE

Conference reviewing: EMNLP (2014, 2013), EACL (2014), COLING (2014), IWCS (2015, 2013),
ACL (2012), Texas Linguistic Society (2012)

Journal reviewing: Computational Linguistics (2), Language Resources and Evaluation (1)

Conference website developer/maintainer: IWCS-2013

SELECTED OPEN SOURCE PROJECTS

Numerous projects at <http://github.com/dhgarrette>

Natural Language Toolkit (NLTK) – <http://www.nltk.org/> Feb 2007 - Present
· Toolkit for natural language processing in Python Committer since Jun 2007

Spring Batch – <http://static.springsource.org/spring-batch/> Oct 2008 - Sep 2009
· Application framework for batch processing in Java Committer since Jan 2009

OTHER WRITING

Some thoughts on the relationship between computational linguistics and literary scholarship

Hannah Alpert-Abrams with Dan Garrette

Language Log, Sept 12, 2013

PROGRAMMING LANGUAGES

Skilled: Scala, Python, Java (ordered by frequency of use)

Previous Experience: C, Haskell, MATLAB, Prolog, R, SQL (ordered alphabetically)

OTHER SELECTED PROFESSIONAL EXPERIENCE

Accenture

Consultant

Sep 2008 - Aug 2009

- Served as one of four committers to the open-source Spring Batch framework.
 - Designed and developed new functionality. Identified and fixed bugs.
 - Wrote reference documentation and answered questions on the public forum.
- Assisted Accenture projects as a Subject Matter Expert for Spring Batch.
- Designed Spring Batch training curriculum and led on-site training in the US and India.
- Wrote documentation on Accenture's approach to Java development for use company-wide.
- Certified by Accenture as a Technology Architect.

Analyst

May 2007 - Sep 2008

- Developed large-scale applications in Java.
- After just four months, was made a sub-team leader, formally leading two other developers.
- Trained new developers. Wrote wiki articles for reference. Ran sessions to teach new skills.
- After 15 months, promoted to Consultant. (Normal requirement is 2 to 3 years).

The Burwood Group

Consulting Intern

Jan 2006 - Jun 2006

Illinois Wesleyan University

Technology Peer for the IWU Career Center

Sep 2005 - Dec 2005

- Responsible for redesign of Career Center website, used regularly by students, alumni, and employers.

TransUnion

Intern

Summers 2001-2005

- Fixed errors in the application that interacts with the credit database. Coded in C.
- Worked closely with subject matter experts to determine handling of credit information.

UNIVERSITY ACTIVITIES

Graduate

Organizer of the Natural Language Learning reading group (Aug 2011 - present)

Undergraduate

John Wesley Powell Student Research Conference - Presenter

Symphonic Winds - Member, Percussion Section Leader for 5 semesters

Civic Orchestra, Opera Orchestra, Titan Band, Percussion Ensemble - Member