KATHERINE A. KEITH

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EDUCATION

University of Massachusetts Amherst   2016–Present
Ph.D. in Computer Science (in progress)   *Amherst, MA*
M.S. in Computer Science, February 2020

Lewis & Clark College   2011–2015
B.A. in Mathematics with departmental honors, summa cum laude   *Portland, OR*
Minor: Chinese

RESEARCH EXPERIENCE

Graduate Research Assistant   September 2016–Present
University of Massachusetts, Amherst   *Amherst, MA*

· Natural language processing, machine learning, and computational social science research
· Advisor: Dr. Brendan O'Connor

Undergraduate Research Assistant (Economics)   May 2014–August 2014
Lewis & Clark College   *Portland, OR*

· Developed an agent-based simulation of intergenerational wealth transfer in medieval England
· Funding: Andrew W. Mellon Collaborative Student-Faculty Research Grant
· Advisor: Dr. Clifford Bekar

PEER-REVIEWED CONFERENCE PUBLICATIONS

1. Uncertainty over Uncertainty: Investigating the Assumptions, Annotations, and Text Measurements of Economic Policy Uncertainty. **Katherine A. Keith**, Christoph Teichmann, Brendan OConnor, and Edgar Meij. In *Proceedings of the Fourth Workshop on Natural Language Processing and Computational Social Science (at EMNLP)*. 2020.

2. Text and Causal Inference: A Review of Using Text to Remove Confounding from Causal Estimates. **Katherine A. Keith**, David Jensen, and Brendan O'Connor. In *Proceedings of Annual Meeting of the Association for Computational Linguistics (ACL)*. 2020.

3. Modeling financial analysts' decision making via the pragmatics and semantics of earnings calls. **Katherine A. Keith** and Amanda Stent. In *Proceedings of Annual Meeting of the Association for Computational Linguistics (ACL)*. 2019.

4. Uncertainty-aware generative models for inferring document class prevalence. **Katherine A. Keith** and Brendan O'Connor. In *Proceedings of Empirical Methods in Natural Language Processing (EMNLP)*. 2018.

5. Monte Carlo Syntax Marginals for Exploring and Using Dependency Parses. **Katherine A. Keith**, Su Lin Blodgett, and Brendan O'Connor. In *Proceedings of North American Chapter of the Association for Computational Linguistics* (NAACL). 2018.

6. Identifying civilians killed by police with distantly supervised entity-event extraction. **Katherine A. Keith**, Abram Handler, Michael Pinkham, Cara Magliozzi, Joshua McDuffie, and Brendan O'Connor. In *Proceedings of Empirical Methods in Natural Language Processing (EMNLP)*. 2017.

INDUSTRY EXPERIENCE

Research Intern June–August 2020
Bloomberg L.P. *Remote*

· Mentors: Dr. Edgar Meij, Dr. Christoph Teichmann
· Resulted in publication at the *Workshop on Natural Language Processing and Computational Social Science (at EMNLP), 2020.*

Research Intern May–August 2018
CTO Data Science Team, Bloomberg L.P. *New York, New York*

· Mentor: Dr. Amanda Stent
· Resulted in publication at the *Association of Computational Linguistics, 2019*

TEACHING EXPERIENCE

Instructor of Record
CS335: Machine Learning Spring 2020
Mt. Holyoke College

· Sole instructor for 19 students in the course and responsible for designing and giving lectures, holding office hours, developing problem sets, developing exams, and grading problem sets and exams.

Instructor of Record
CS191: Computer Science First Year Seminar Fall 2019
University of Massachusetts Amherst

· Co-designed curriculum on "Ethical Issues Surrounding Artificial Intelligence Systems and Big Data"
· Led two weekly discussion sections comprising of 19 students each

Graduate Teaching Assistant
CS685: Advanced Natural Language Processing Spring 2018
University of Massachusetts Amherst

· Assisted students with course material and homework during weekly office hours
· Guest lecturer
· Co-designed homework assignments, graded literature review assignment and in-class presentations

Fulbright English Teaching Assistant August 2015–June 2016
U.S. Department of State *Kinmen, Taiwan*

· Taught first through sixth grade ESL courses in a public elementary school
· Facilitated multi-cultural dialogue and programming

Mathematics Tutor January 2012–May 2015
Lewis & Clark College *Portland, OR*

· Tutored students in Calculus I, Calculus II, and Linear Algebra
· Tutored in the Symbolic and Quantitative Resource Center (SQRC)

GRANTS

· Kaggle Open Data Research Grant 2020 ($5000). With Andy Halterman and Sheikh Sarwar.

INVITED TALKS

· Williams College's Computer Science Colloquium—November 15, 2019

· Rutger University's Natural Language Processing Group—November 6, 2019

· Lewis & Clark College's Mathematical Sciences Colloquium—September 24, 2018

GUEST LECTURES

· Mt. Holyoke College, Natural Language Processing—November 13, 2019

· Mt. Holyoke College, Natural Language Processing—October 10, 2019

· University of Massachusetts Amherst, Advanced Natural Language Processing—April 26, 2018

SERVICE & OUTREACH

Reviewer

· CoNLL, 2020
· EMNLP, 2020
· ACL, 2020
· ICWSM, 2019, 2020
· NAACL, 2019

Panelist, CS Graduate School Q&A Panel — May 1, 2020
Cape Cod Community College

Co-chair, CSWomen — February 2019–January 2020
University of Massachusetts Amherst Computer Science Women's Group

Student Volunteer, Women in Engineering and Computing Career Day — October 28, 2019
University of Massachusetts Amherst

Social Co-Chair, CSWomen — January 2017–January 2019
University of Massachusetts Amherst Computer Science Women's Group

"What is computer science?" 7th Grade Guest Lecture — Jan. 3, 2018 and Jan. 7, 2019
Chief Joseph Middle School, Bozeman, Montana

Organizer, CICS Graduate Male Ally Workshop Series — 2017–2018
University of Massachusetts Amherst
`https://github.com/mrlucasch/cics-male-allyship-workshops`

Student Volunteer, Girls Inc. Eureka! Summer Workshop — August 1 & 3, 2017
University of Massachusetts Amherst

Student Volunteer, Women in Engineering and Computing Career Day — October 24, 2016
University of Massachusetts Amherst

MENTEES

· Sirius Just (Undergraduate Honors Thesis, 2019-2020; REU, Summer 2019)

· Tamas Palfi (REU, Summer 2019)

· Hieu Phan (REU, Summer 2019)

· Aaron Mueller (REU, Summer 2017)

GRADUATE AWARDS & HONORS

· Awarded *distinction* for candidacy portfolio submitted to the College of Information and Computer Sciences at University of Massachusetts Amherst (December 2019)

· Bloomberg Data Science Ph.D. Fellowship (awarded May 2019)

· Computing Research Association of Women (CRAW) Graduate Cohort (2017, 2018)

· Empirical Methods in Natural Language Processing (EMNLP) Student Travel Scholarship (2017)

· Paul Utgoff Memorial Graduate Scholarship in Machine Learning (2016)

UNDERGRADUATE AWARDS & HONORS

· Fulbright ETA Grantee with the U.S. Department of State (2015–16)

· Rhodes Scholarship Finalist (2015)

· Marshall Scholarship Finalist (2015)

· Rena Ratte Award, Lewis & Clark College (2015)– *"This is the highest academic award given at Lewis & Clark and is given annually to one undergraduate of senior standing whose abilities and commitment have combined to produce work which is consistently of the greatest distinction."* `https://college.lclark.edu/academics/honors/college_awards/`

· Robert B. Pamplin Jr. Society Fellow, Lewis & Clark College (2012–2015)

· Dean's List, Lewis & Clark College (2011–2015)

· Pi Mu Epsilon Member (2014–2015)

· Barbara Hirschi Neely Four-Year Full-Tuition Scholarship Recipient, Lewis & Clark College (2011–2015)

· NCAA Division III Cross-Country All-Academic (2012)

· Lewis & Clark Cross-Country Four-Year Varsity Letter Winner (2011–2015)

FOREIGN LANGUAGES

Chinese (Mandarin)
HSK Level 4 (tested April 16, 2016)
CET Beijing: 16-week language-intensive immersion program (Spring 2014)