

EDUCATION

Brown University	Ph.D.	2010	Computer Science
Brown University	M.Sc.	2004	Computer Science
University of Washington	B.S.	1999	Computer Science

PROFESSIONAL EXPERIENCE (SELECTED)

Associate Professor	School of Information	08/15-present
Assistant Professor	School of Information	08/09-08/15
University of Texas	Austin, TX	
Visiting Professor		05/12-08/12
CrowdFlower Inc.	San Francisco, CA	
Visiting Researcher	Center for Intelligent Information Retrieval	06/08-05/09
University of Massachusetts	Amherst, MA	

RESEARCH AREAS

Dr. Lease investigates two principal research areas: (1) information retrieval (IR) and (2) crowdsourcing (*human computation*). His IR research develops new models and algorithms to improve search engine experiences, capabilities, and evaluation methodology. His crowdsourcing research spans machine learning and human-computer interaction, including statistical quality assurance and design for human factors, to build hybrid systems integrating AI and human computation.

HIGHLIGHTS

Three Early Career awards : NSF (25.9%), DARPA (9.1%), & IMLS (sole award)	2012-13
Yahoo! Faculty and Research and Engagement Award	2012
Qatar National Research Fund (QNRF) Grant for Arabic Search Technologies	2015
Invited Keynote, Intl. Joint Conference on Natural Language Processing (IJCNLP)	2011
Invited Speaker, Forum for Information Retrieval Evaluation (FIRE)	2016
Invited Speaker, Microsoft Research (MSR) Faculty Summit	2014
Won Social Computing, Behavioral Modeling & Prediction (SBP) Challenge	2012
Best Results, TREC Relevance Feedback track	2008
Samsung HumanTech Paper Award (with HyunJoon Jung)	2015
Best Paper Award, Ph.D. Workshop at ACM CIKM Conference	2007
Talk slides viewed over 15,000x in past year (on SlideShare.com)	2016

TEACHING

INF384H/CS395T	Information Retrieval & Web Search	7x since Spring 2010
INF385T/CS395T	Human Computation & Crowdsourcing	4x since Spring 2011
INF385T/CS395T	Data-Intensive Computing for Text Analysis	Fall 2011
INF380E	Perspectives on Information	4x since Spring 2013
INF383D	Mathematical Foundations of Information Studies	Spring 2010 & 2012
INF384C	Organizing Information	Fall 2010, Spring 2011

PROFESSIONAL SERVICE & SOCIETIES

<i>Conference Co-Chair</i>	4th AAAI Human Computation (HCOMP) & Crowdsourcing Conf. , 2016
<i>Senior PC</i>	SIGIR'13-14 & '16-17; HCOMP'14-15, CIKM'14-15, HLT-NAACL'12
<i>Senior Assoc. Ed.</i>	Journal Assoc. for Info. Science & Technology (JASIS&T), 2016-2017
<i>Guest Editor</i>	Springer <i>Information Retrieval</i> April 2013 Special Issue: Crowdsourcing
<i>Program Co-Chair</i>	CrowdConf 2013
<i>Tutorial Presenter</i>	SIAM Data Mining 2013; SIGIR'12; WSDM'11, SIGIR'11, CrowdConf'11
<i>TREC Organizer</i>	Crowdsourcing Track 2011-2013, Relevance Feedback Track 2010
<i>Workshop Org.</i>	HCOMP 2013, SIGIR 2011, WSDM 2011, SIGIR 2010
<i>Ph.D. Consortium</i>	HCOMP 2014 (Co-Chair)
<i>Program Comm.</i>	2014 : HCOMP; 2012 : SIGIR, WWW CrowdSearch; 2011 : ACL-HLT, ECIR, EMNLP, IJCNLP, SIGIR, WWW; 2010 : EMNLP, SIGIR

SELECTED PUBLICATIONS

- [1] Hyun Joon Jung and **Matthew Lease**. [Modeling Temporal Crowd Work Quality with Limited Supervision](#). In *Proceedings of the 3rd AAAI Conference on Human Computation (HCOMP)*, pages 83–91, 2015.
- [2] Aniket Kittur, Jeff Nickerson, Michael S. Bernstein, Elizabeth Gerber, Aaron Shaw, John Zimmerman, **Matthew Lease**, and John J. Horton. [The Future of Crowd Work](#). In *ACM Conference on Computer Supported Cooperative Work (CSCW)*, pages 1301–1318, 2013.
- [3] Tyler McDonnell, **Matthew Lease**, Tamer Elsayad, and Mucahid Kutlu. [Why Is That Relevant? Collecting Annotator Rationales for Relevance Judgments](#). In *Proceedings of the AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*, 2016. 10 pages.
- [4] An Thanh Nguyen, Byron C. Wallace, and **Matthew Lease**. [A Correlated Worker Model for Grouped, Imbalanced and Multitask Data](#). In *Proceedings of the 32nd International Conference on Uncertainty in Artificial Intelligence (UAI)*, 2016.
- [5] An Thanh Nguyen, Byron C. Wallace, and **Matthew Lease**. [Combining Crowd and Expert Labels using Decision Theoretic Active Learning](#). In *Proceedings of the 3rd AAAI Conference on Human Computation (HCOMP)*, pages 120–129, 2015.
- [6] **Matthew Lease**. [An Improved Markov Random Field Model for Supporting Verbose Queries](#). In *Proceedings of the 32nd international ACM SIGIR conference on Research and development in information retrieval*, pages 476–483. ACM, 2009.
- [7] **Matthew Lease**, James Allan, and W. Bruce Croft. [Regression Rank: Learning to Meet the Opportunity of Descriptive Queries](#). In *31st European Conference on Information Retrieval (ECIR)*, pages 90–101, 2009.
- [8] Aashish Sheshadri and **Matthew Lease**. [SQUARE: A Benchmark for Research on Computing Crowd Consensus](#). In *Proceedings of the 1st AAAI Conference on Human Computation (HCOMP)*, pages 156–164, 2013.
- [9] Aibo Tian and **Matthew Lease**. [Active Learning to Maximize Accuracy vs. Effort](#). In *Proceedings of the 34th Annual ACM SIGIR conference on Research and Development in Information Retrieval*, pages 145–154, 2011.
- [10] Yinglong Zhang, Jin Zhang, **Matthew Lease**, and Jacek Gwizdka. [Multidimensional Relevance Modeling via Psychometrics and Crowdsourcing](#). In *Proc. of the 37th ACM SIGIR conference on Research and Development in Information Retrieval*, pages 435–444, 2014.