Laura (Wendlandt) Burdick

wenlaura@umich.edu   http://laura-burdick.github.io

Education

Ph.D., Computer Science and Engineering   August 2020
University of Michigan, Ann Arbor, MI
"Understanding Word Embedding Stability Across Languages
and Applications"
Advisor: Dr. Rada Mihalcea
Certificates: U-M Graduate Teaching Certificate
   Description: www.crlt.umich.edu/um.gtc/description

M.S., Computer Science and Engineering   April 2017
University of Michigan, Ann Arbor, MI

B.S., Computer Science   May 2015
Grove City College, Grove City, PA

Publications

"Analyzing Connections Between User Attributes, Images, and Text"
L. Burdick, R. Mihalcea, R. L. Boyd, J. W. Pennebaker
Cognitive Computation, February 2020

"Identifying Visible Actions in Lifestyle Vlogs"
Ignat, O., **L. Burdick**, J. Deng, R. Mihalcea
Association for Computational Linguistics, 2019

"Building a Flexible Knowledge Graph to Capture Real-World Events"
L. Burdick, M. Wang, O. Ignat, S. Wilson, Y. Zhang, Y. Wei, R. Mihalcea,
J. Deng
Text Analysis Conference, 2019

"Factors Influencing the Surprising Instability of Word Embeddings"
Wendlandt, L., J. K. Kummerfeld, R. Mihalcea
North American Chapter of the Assoc. for Computational Linguistics, 2018

"Entity and Event Extraction from Scratch Using Minimal Training Data"
Wendlandt, L., S. Wilson, O. Ignat, C. Welch, L. Zhang, M. Wang, J.
Deng, R. Mihalcea
Text Analysis Conference, 2018

"Multimodal Analysis and Prediction of Latent User Dimensions"
Wendlandt, L., R. Mihalcea, R. L. Boyd, J. W. Pennebaker
Social Informatics, 2017

"Data Science in Service of Performing Arts: Applying Machine Learning to
Predicting Audience Preferences"
Abernethy, J., C. Anderson, C. Dai, J. Dryden, E. Schwartz, W. Shen, J.
Stroud, **L. Wendlandt**, S. Yang, D. Zhang
Bloomberg Data for Good Exchange, 2016

Grants and Awards	**Rackham Outstanding Graduate Student Instructor Award** For dedication and excellence in teaching	2019
	Google ExploreCSR Grant, $35k (2018), $18k (2019) Co-PI on grants to develop a program introducing undergraduate women and underrepresented minorities to computer science research	2018, 2019
	Center for Research on Learning and Teaching **Gilbert Whitaker Fund, $5,725** Co-PI on innovative teaching grant to develop EECS 198, a new one-credit computer science class	2018
	Honorable Mention, National Science Foundation **Graduate Research Fellowship Program**	2017
	John David Ormerod Memorial Award Top-ranked computer science major in class (Grove City College)	2013
Employment	**Research Assistant, MAJORANA Research Team** Participated in Computational Astronomy and Physics REU (Research Experience for Undergraduates), contributed to international physics research team studying neutrino detection, created extensible modeling capabilities and models for data processing software	2013
	Software Development Intern, Amazon Developed complete web application for use in Amazon's Fulfillment Centers, tested with users, prepared code for global production	2014
Teaching & Advising	**Primary Instructor, Discover CS (EECS 198)** Designed and taught a new one-credit freshmen-level class (Python programming language)	Fall 2018
	Co-instructor, Natural Language Processing (EECS 498/595) Lectured 25% of class, planned curriculum, held office hours, graded (Python programming language) *Ranked by School of Information students in top quartile of classes for overall quality and amount learned*	Fall 2017
	Graduate Student Instructor, **Data Structures and Algorithms (EECS 281)** Taught two discussion sections, held office hours, graded, wrote exams and projects (C++ programming language)	Fall 2015, Winter 2016
	Student Research Advising Yiming Zhang (Undergraduate) and Yumou Wei (Master's), *Rare Named Entity Recognition*	Summer & Fall 2019
	Hui Liu (Master's) *Graph Embeddings for Text*	Fall 2018
	Mingyuan Zhang (Undergraduate), *Embedding Stability*	Summer 2018
	Rui Lin (Undergraduate), *Twitter Geolocation*	Spring 2018
	Po-Heng Chen (Undergraduate), *Twitter Geolocation*	Spring 2018

Teaching & Advising, Cont.	**Center for Research on Learning & Teaching in Engineering**	
	Engineering Teaching Consultant	Fall 2019, Winter 2020
	Co-facilitator, "Leading Problem Solving Sessions" seminar	2020
	Co-facilitator, "Teaching Engineering: Getting Started" seminar	2020
	Co-facilitator, "It's Time for Action: Generating an Active Learning Plan" seminar	2019, 2020
	Co-facilitator, "Addressing Problematic Team Dynamics" seminar	2019
	Co-facilitator, "Making Teamwork Work" seminar	2018
	Practice Teaching Facilitator, Grad. Student Instructor Orientation	2019
	Practice Teaching Facilitator, Active Learning Practice	Winter & Fall 2019, 2020

Other

Guest instructor, Natural Language Processing (EECS 595)		2019
Guest instructor, Discover CS (EECS 198)		2019
Guest instructor, Interdisciplinary Committee on Organizational Studies (ICOS) Big Data Summer Camp		2018
Guest lecturer, Information Retrieval (EECS 486)		2018
Personal academic tutor (Grove City College)		2013 - 2015
TA, Engineering Physics I and II Labs (Grove City College)		2012
TA, Non-engineering Physics Lab (Grove City College)		2013
Grader, Computer Programming I and II (Grove City College)		2013, 2015
Grader, Computer Architecture and Organization (Grove City College)		2014

Professional Activities	**Service**	
	Association for Computational Linguistics (ACL) Committee to search for and select first Equity Director	2019
	Student Co-Chair, Student Research Workshop, North American Chapter of the ACL (NAACL-HLT)	2019

Local Service

Co-chair, a2-dlearn (Ann Arbor deep learning symposium)	2019
Unconference Session Facilitator, Michigan AI Symposium	2018
Editorial Board Member, Michigan AI Blog	2018
Webmaster, LIT Research Group (http://lit.eecs.umich.edu)	2016 - *Current*

Journal Reviewer

Computer Speech & Language	2017, 2019

Program Committee Member

Association for the Advancement of Artificial Intelligence (AAAI)	2019, 2020
Dialog System Technology Challenges (DSTC), AAAI Workshop	2019, 2020
Association for Computational Linguistics (ACL)	2019, 2020
North American Chapter of the ACL (NAACL-HLT)	2019
Affective Computing and Intelligent Interaction (ACII)	2019
Empirical Methods in Natural Language Processing (EMNLP)	2018, 2019

Talks		
	UM Artificial Intelligence Lab Honors Competition	Oct. 2019
	A Gentle Introduction to Word Embeddings for the Computational Social Sciences (CSS), *a workshop at the European Symposium Series on Societal Challenges in CSS*	Sept. 2019

Talks, Cont.	PyData Ann Arbor Meetup: Lightning Talk	July 2019
	Ann Arbor / Detroit NLPers Meetup	Aug. 2018
	Midwest Speech and Language Days	May 2018
	Decision Consortium, Psychology Department, U-M	May 2016

Outreach

Co-director, Girls Encoded (GE)   2016 - *Current*
https://girlsencoded.eecs.umich.edu/
Focused on recruiting and retaining women in computer science

Co-director, GE Explore CS Research   2018 - *Current*
Yearly research mentoring program introducing undergraduate
women and underrepresented minorities to computer science research

Co-founder, CS KickStart   2016
http://cskickstart.eecs.umich.edu/
Summer camp introducing freshmen women to computer science

Co-director and Instructor, GE Middle School Outreach   2018 - 2019
Weekly computer science lessons for middle schoolers

Co-organizer, Women in Computing Celebration   2017
Opera about Ada Lovelace and lightning talks by women in computing

Additional K-12 Outreach
Hour of Code Volunteer   2017
N. American Computational Linguistics Olympiad (NACLO) Grader   2016
Panel discussion organizer for GE High School Education Day   2016

Additional University-Level Outreach
Advisor for CS KickStart   2017
Funding Committee for GE funding of student-led initiatives   2017
Python tutorial instructor for CS KickStart   2017, 2018, 2019
Organizer of Women in Computing Panels   2017, 2018, 2019
Ensemble for Computer Science and Engineering Ladies (ECSEL)   2016, 2018, 2019
    mentor for incoming graduate students
Mentor for "Lunch & Lab with a Grad"   2016, 2017, 2018, 2019

Skills

C++, C++ STL, Python, Java, C, Objective C, Bash, Linux, Mac OS,
Windows OS, Git, HTML, CSS, JavaScript, jQuery

Relevant Coursework

Graduate Level
Natural Language Processing, Machine Learning, Advanced AI, Computational Complexity, Continuous Optimization Methods, Parallel Computing

Undergraduate Level
Algorithms, Introduction to AI, Ethics in the Computing Profession, Foundations of CS, Operating Systems, Object-Oriented and Advanced Programming, Data Communications and Networking, Data Structures and Algorithms, Computer Architecture and Organization, Database Management Systems, Discrete Math

(CV compiled July 27, 2020.)