Laura Biester

Website: laurabiester.com
Email: lbiester@umich.edu
LinkedIn: lbiester
GitHub: github.com/lbiester

EDUCATION

University of Michigan — Ann Arbor, MI
Ph.D. in Computer Science and Engineering, Advisor: Rada Mihalcea — Expected 2023

University of Michigan — Ann Arbor, MI
M.S. in Computer Science and Engineering, GPA: 4.0 — May 2020

Carleton College — Northfield, MN
B.A. in Computer Science, GPA: 3.85, *Magna Cum Laude* — June 2016

PUBLICATIONS

[†]joint first authorship

[1] **L. Biester**, K. Matton, J. Rajendran, E. Mower Provost, and R. Mihalcea, "Understanding the Impact of COVID-19 on Online Mental Health Forums", in *ACM Transactions on Management Information Systems: Special Issue on Using AI and Data Science to Handle Pandemics and Related Disruptions*, Dec. 2021.

[2] **L. Biester**, C. Banea, and R. Mihalcea, "Building Location Embeddings from Physical Trajectories and Textual Representations", in *2020 AACL-IJCNLP*, Dec. 2020.

[3] **L. Biester**[†], K. Matton[†], J. Rajendran, E. Mower Provost, and R. Mihalcea, "Quantifying the Effects of COVID-19 on Mental Health Support Forums", in *1st Workshop on NLP for COVID-19 (Part 2) at EMNLP*, Nov. 2020.

INDUSTRY EXPERIENCE

IBM — Remote
Research Intern — Summer 2021
  - Matching patient descriptions to clinical trials (2021 TREC Clinical Trials challenge)
  - Part of the EMRA (electronic medical records analysis) team, mentored by Bharath Dandala

Pinterest — San Francisco, CA
Software Engineer — August 2016 - August 2018
  - Database sharding strategies/implementation for advertiser data
  - Inconsistency detection framework for distributed graph databases

Gumroad — San Francisco, CA
Software Engineering Intern — Summer 2015
  - API to allow creators to track sales data
  - Feature to auto-populate mp3 metadata
  - Feature to allow users to display their Gumroad site on their own domain

Teaching and Mentorship

- **Instructor of Record** at University of Michigan   Winter 2022
  Elementary Programming Concecpts (EECS 183)
- **Instructor of Record** at University of Michigan   Fall 2019, Fall 2020
  Discover Computer Science (EECS 110/198)
- **Prefect** at Carleton College   Spring 2014, Fall 2015, Winter 2016
  Mathematics of Computer Science (CS 202)
- **Prefect** at Carleton College   Winter 2015, Spring 2015
  Data Structures (CS 201)

Mentorship

- Vanita Sharma (Undergraduate at University of Michigan)   Fall 2021-Present
  Annotator Gender Bias in NLP Benchmarks
- Yujian Liu (Master's Student at University of Michigan)   Winter 2021-Present
  Temporal Effects in Depression Classification Methods
- Axel Avram (High School Student)   Summer 2020-Fall 2020
  Inter-country Sentiment During COVID-19
- Shiyu Qu (Undergraduate at University of Michigan)   Fall 2019-Winter 2020
  Location Embeddings from Reddit
- Camilo Muñoz (Master's Student at The University of Waterloo)   Winter 2018
  Ads API Team Intern at Pinterest

Professional Activities

Talks

- IBM @ TREC CT-Track 2021   November 2021
  Text REtrieval Conference (Conference Talk)
- Towards Understanding Mental Health with Passively Collected Data   October 2021
  Carleton College (Invited Talk)

Poster Presentations and Flash Talks

- Self-Reported Mental Health Status for Classification Labels: Effects of Data Collection   April 2021
  CRA-WP Grad Cohort for Women Workshop
- Changes on Mental Health Forums during the COVID-19 Pandemic   October 2020
  Michigan AI Symposium
- Quantifying the Effects of COVID-19 on Mental Health Support Forums   July 2020
  NLP COVID-19 Workshop at ACL
- The Applicability of Embeddings to Location Time Series Data   May 2019
  Midwest Speech and Language Days

Reviewing

- ACL Rolling Review   2021
- ACL   2021
- NLP for Positive Impact Workshop (@ACL)   2021

- SocialNLP Workshop (@NAACL) 2021
- ACII 2021
- Natural Language Processing and Computational Social Science Workshop (@EMNLP) 2020

Volunteer Activities

- ECSEL+ Treasurer Fall 2021–Present
  As a board member of ECSEL+ (Ensemble of CSE Ladies+), managed the group's finances and completed budget requests.
- ECSEL+ Professional Development Chair Fall 2020–Summer 2021
  As a board member of ECSEL+, organized practice prelim talks for students in CSE at the University of Michigan.
- AI4All Instructor July 2020
  Taught Python programming to twenty high school students, with a focus on applications in artificial intelligence.
- AI4All Project Lead July 2019
  Developed a NLP project and provided guidance for seven high school students as they learned Python and completed the project.
- Explore CS Research Organizer Fall 2018–Winter 2019
  One of five organizers of the "Explore CS Research Program," which aims to introduce students from underrepresented backgrounds to computer science research. Reviewed applications, assigned faculty mentors to students, and answered ongoing questions from students.
- Student Departmental Advisor Fall 2015–Spring 2016
  Chosen as one of two student departmental advisors at Carleton College by CS faculty. Advised students each term on picking classes, and organized a weekly "CS at the Tavern" social event.
- Lovelace Board Member and Chair Winter 2015–Spring 2016
  Served as a member of the board of Carleton's women in CS group. Helped to organize weekly lab sessions, dinners, and Carleton's first diversity in CS workshop.

Skills

- **Programming Languages:** Python, Java, Ruby, Javascript
- **Data/Machine Learning:** PyTorch, Transformers, SKLearn, Numpy, Hadoop, Hive, SQL, HBase, Vitess
- **Web Technologies:** HTML, CSS, Flask, Ruby on Rails

Scholarships and Awards

- Graduate Student Service Award for Excellence in Climate, Diversity, and Inclusion 2021
  University of Michigan CSE Division
- Phi Beta Kappa 2016
- Kleiner Perkins Caufield & Byers Engineering Fellowship 2015
- Grace Hopper Conference Scholarship Recipient 2015
- Tapia Conference Scholarship Recipient 2015