Dr. Aron Culotta – Curriculum Vitae

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Director
Center for Community-Engaged Artificial Intelligence
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I conduct interdisciplinary research in human-centered artificial intelligence, particular in areas of natural language processing, social network analysis, and machine learning, with applications in public health, emergency response, criminal justice, and civic transparency.

Contents

Education

University of Massachusetts at Amherst Amherst, MA
Ph.D., Computer Science, 2008 *advisor: Andrew McCallum*

University of Massachusetts at Amherst Amherst, MA
M.S., Computer Science, 2004

Tulane University New Orleans, LA
B.S., Computer Science (Math minor), *summa cum laude*, 2002

Professional History

Associate Professor of Computer Science 2020 - present
Tulane University New Orleans, LA

Lead the Text Analysis in the Public Interest lab, conducting research in natural language processing, social network analysis, and machine learning.

Data Scientist 2018 - present
Voluble Toronto, Ontario

Develop data science solutions to analyze social media for litigation, including defamation, trademark infringement, and deceptive advertising. Example cases

include Dominion Voting Systems v. Fox News and State of North Dakota v. United States of America.

Associate Professor of Computer Science 2019 - 2020
Assistant Professor of Computer Science 2013 - 2019
Illinois Institute of Technology Chicago, IL

Assistant Professor of Computer Science 2012 - 2013
Northeastern Illinois University Chicago, IL

Assistant Professor of Computer Science 2009 - 2012
Southeastern Louisiana University Hammond, LA

Chief Scientist 2007 - 2022
IT.com Washington, DC

Designed and implemented large-scale statistical topic models for knowledge discovery from email and social media data for law and customer support domains.

Software Engineer 2008
Amazon.com Seattle, WA

Designed product attribute extraction algorithms to enhance the product catalog. Provide scalable, practical algorithms for large, real-world data sets.

Research Assistant 2002 - 2008
University of Massachusetts Amherst, MA

Research Intern 2007
Microsoft Research Redmond, WA

Designed statistical machine learning algorithm to extract and synthesize information from search results.

Research Intern 2005
Google, Inc. New York, NY

Designed machine learning algorithm to combine relation extraction and knowledge discovery from Wikipedia documents.

Research Intern 2003
International Business Machines Yorktown Heights, NY

Developed novel support vector machine algorithm to extract relations between people and organizations in newswire text.

Research Assistant 2001
University of Alabama Huntsville, AL

Optimized memory allocation algorithms for Java's Virtual Machine. Summer program sponsored by National Science Foundation.

Honors and Awards

- Teacher of the Year, 2018, Illinois Institute of Technology, Computer Science Department
- Nayar Prize II Finalist, "Cyberbullying Early Warning and Response System," 2016
- "Outstanding Paper Honorable Mention," AAAI-2015 (1 of 531 accepted papers)
- "Best Paper Honorable Mention," CSCW-2014 (15 of 134 accepted papers)
- "Outstanding Paper Honorable Mention," AAAI-2004 (2 of 121 accepted papers)
- Microsoft Live Labs Fellow, 2006-2008 (full graduate studies tuition plus stipend)

Research Funding [NSF Profile]

$4.7M total funding ($4M external): 7 NSF (6 as PI, 1 as co-PI); 1 NEH (co-PI); 1 LA Board of Regents (PI).

role	years	amount (to home univ.)	source	title	co-Is
PI	2024–2027	$1,499,743 ($1,499,743)	NSF-SCC	Supporting Transparency and Equity in the Criminal Legal System through a Community-Driven Digital Platform	Andrea Boyles, Nicholas Mattei, Andrea Armstrong (Loyola), Darrin Browder (Court Watch NOLA)
PI	2024–2027	$600,000 ($277,178)	NSF-HCC	Socio-linguistic modeling to understand the long-term dynamics of news engagement in online media	Mustafa Bilgic, Matthew Shapiro IIT
co-PI	2024–2025	$149,618 ($149,618)	NEH	Exploring Artistic Production with the Artistic Network Toolkit (ANT)	Alexis Culotta (PI)
PI	2023–2026	$600,000 ($600,000)	Tulane Office of Research	Tulane Center of Excellence in Community-Engaged Artificial Intelligence	Nick Mattei, Alessandra Bazzano, Caryn Bell, Andrea Boyles, Patrick Button
co-PI	2022–2023	$5,000 ($5,000)	Tulane - Newcomb Institute	Visualizing Raphael's Renaissance Network: A Digital Humanities Collaboration	Alexis Culotta (PI)
PI	2023–2023	$25,000 ($19,990)	NSF-IUCRC	IUCRC Planning Grant: Tulane: Center for Applied Artificial Intelligence	Nick Mattei, Allan Ding, Matt Montemore, Jihun Hamm, Henry Chu, Zizhan Zheng
PI	2019–2022	$299,995 ($89,995)	NSF-HDBE *funding rate=14%*	Collaborative Research: Predicting Real-time Population Behavior during Hurricanes Synthesizing Data from Transportation Systems and Social Media	Samiul Hasan, Claire Knox, Naveen Eluru U. Central Florida
co-PI	2019–2021	$299,871 ($299,871)	NSF-IIS-EAGER	Understanding the Relationship between Algorithmic Transparency and Filter Bubbles in Online Media	Mustafa Bilgic (PI) Matthew Shapiro IIT
PI	2019-2020	$25,000 ($25,000)	ERIF (IIT)	Social Media Analysis of Indicators of Eating Disorder Treatment Seeking Behavior	Alissa Haedt-Matt IIT (Psych)

role	years	amount (to home univ.)	source	title	co-Is
PI	2016–2019	$471,992 ($471,992)	NSF-IIS *funding rate=15%*	Quantifying Multifaceted Perception Dynamics in Online Social Networks	Jennifer Cutler Northwestern-Kellogg
PI	2015–2018	$499,251 ($304,725)	NSF-IIS *funding rate=14%*	Reducing Classifier Bias in Social Media Studies of Public Health	Sherry Emery NORC
co-PI	2016-2017	$100,000 ($100,000)	Nayar II	Cyberbullying Early Warning and Response System	Libby Hemphill U. Michigan
PI	2014	$25,000 ($25,000)	ERIF (IIT)	Tracking perception dynamics in online social networks	Jennifer Cutler Northwestern-Kellogg
PI	2010–2013	$109,587 ($109,587)	Louisiana Board of Regents *ranked 1st of 150 submissions*	Discovering Socially Valuable Trends by Extracting Personal Experiences from the Web	
Total:		**$4,685,057 ($3,982,709)**			

Research Leadership

Director, Tulane Center of Excellence in Community-Engaged Artificial Intelligence (2022-present) [link]: In this role, I lead a multi-disciplinary team of technologists, designers, social scientists, and community partners conducting research into frameworks to create and deploy AI systems that are inclusive, effective, fair, transparent, and accountable. This diverse team brings together complementary expertise to address the socio-technical challenges and opportunities presented by the rapid advancement of AI. The Center builds on a long history of community-engagement at Tulane, exemplified by the Center for Public Service, a key partner in our education initiatives. By joining Tulane faculty expertise with community partners to improve society, the Center aims to serve as a model for responsibly deploying AI research across the country.

Established in 2022 with seed funding from Tulane's Office of Research, the Center leads cross-disciplinary scientific research, facilitates project-based learning experiences, conducts extensive community outreach, hosts workshops and symposiums, and awards seed grants to support AI research across the university. A recent online profile summarizes this work.
Recent highlights include:

- **External funding:** Center faculty received 3 new federal awards in FY23 totaling $1.35M. Submitted an additional 8 proposals in FY23 totaling $33.59M. I was PI or co-PI on 9 of 11 proposals submitted in FY23.
- **Collaborations:** Worked to expand center collaborations by writing joint proposals with 7 universities (Carnegie Mellon, UC-Boulder, UCLA, Loyola, Illinois Tech, Univ. of Arkansas, UT-Dallas); and with 3 non-profits as co-PIs and Senior Personnel (Court Watch NOLA, Eye on Surveillance, Kiva). The proposals are highly multi-disciplinary, with PIs from 7 disciplines (computer science, public health, sociology, political science, design, art, and law).
- **Publications:** 19 center publications at top venues across disciplines, including MIT Sloan Management Review, Artificial Intelligence, Journal of Medical Internet Research, American Journal of Health Economics, Transactions on Recommender Systems, and Journal of Autonomous Agents and Multiagent Systems

- **Education:** Our approach to education and training is to engage undergraduate students in research projects that have immediate impact. Through Service Learning Senior Capstone courses, which I developed, dozens of students have worked hand-in-hand with local non-profits and Center faculty to apply cutting-edge AI systems to improve access to city council meetings, to monitor equity in the court system, and to track blight across the city.
- **Dissemination, Outreach, Community Building:** We organize community workshops on AI, academic networking events, and a distinguished speaker series. In FY22-23, 25 presentations and panels, 5 workshops, 6 invited lectures, 7 podcasts, and 4 news articles. See more here.
- **Supporting AI at Tulane:** I led two new initiatives: a Community-Engaged AI and Data Science Summer Research Grant Program (3 awardees at $10k each in Summer'24 from SSE, ARCH, SSW) and a CEAI Lunch and Learn Seminar Series (two speakers in Spring'24; four for Fall'24). These are co-sponsored by CAIDS.

Director, Jurist Center for Artificial Intelligence [link]: Established by the generous support of the Harold L. and Heather E. Jurist NC '64 Endowed Fund, the Tulane Center of Excellence in Artificial Intelligence supports research and education in artificial intelligence, machine learning, and data science, with a focus on using AI in applications that pave the way toward a healthier, more connected global community. The Center supports AI-related events at Tulane and beyond, and funds PhD students to conduct summer research in AI. Duties include outreach, donor relations, budgeting, reporting, and administering the summer research program, which funds between 3-7 PhD students each summer.

Publications

15 journal articles, 43 refereed conference proceedings, 18 refereed workshop proceedings

Google Scholar statistics (07/2024): 7,670 citations h-index=39 i10-index=58
https://scholar.google.com/citations?user=481oUzkAAAAJ

A note on conference publications: In computer science, publications in high-quality, archival conference proceedings undergo rigorous peer review and are generally considered the most important measure of research impact. As a report from the Computing Research Association notes, "conference publication is preferred to journal publication, and the premier conferences are generally more selective than the premier journals."[1]
To briefly summarize my publication record, below I list the number of publications in top-tier conferences in each area:

- **Artificial Intelligence:** AAAI (8), IJCAI (2)
- **Web and Social Media Analysis:** ICWSM (8), ASONAM (2), WWW (2)
- **Natural Language Processing:** HLT/NAACL (4), ACL (1), EMNLP (1)
- **Data Mining/Machine Learning:** ICML (1), KDD (1), ICDM (1), SDM (2), CIKM (1)
- **Human-Computer Interaction:** CHI (1), CSCW (1)

Underlined names below indicated student authors whom I advised or co-advised.

Thesis

T1 **Aron Culotta**. *Learning and inference in weighted logic with application to natural language processing.* PhD thesis, University of Massachusetts, May 2008. (18 citations in Google Scholar).

[1] Computing Research Association, "Evaluating Computer Scientists and Engineers for Promotion and Tenure", September 1999.

Journal Publications

J1 Tanmoy Bhowmik, Naveen Eluru, Samiul Hasan, **Aron Culotta**, and Kamol Chandra Roy. Predicting hurricane evacuation behavior synthesizing data from travel surveys and social media. *Transportation Research Part C: Emerging Technologies*, 165:104753, 2024. (7.6 impact factor).

J2 **Aron Culotta** and Nicholas Mattei. Use open source for safer generative AI experiments. *MIT Sloan Management Review*, 65(2), 2023. (4.627 impact factor).

J3 Xintian Li and **Aron Culotta**. Domain adaptation for learning from label proportions using domain-adversarial neural network. *Springer Nature: Computer Science*, 4(5):615, 2023.

J4 Kamol Chandra Roy, Samiul Hasan, **Aron Culotta**, and Naveen Eluru. Predicting traffic demand during hurricane evacuation using real-time data from transportation systems and social media. *Transportation Research Part C: Emerging Technologies*, 131:103339, 2021. (7.6 impact factor; 68 citations in Google Scholar).

J5 Xuan Song, Haoran Zhang, Rajendra A. Akerkar, Huawei Huang, Song Guo, Lei Zhong, Yusheng Ji, Andreas Lothe Opdahl, Hemant Purohit, Andre Supkin, Akshay Pottathil, and **Aron Culotta**. Big data and emergency management: Concepts, methodologies, and applications. *IEEE Transactions on Big Data*, 2020. (7.5 impact factor; 44 citations in Google Scholar).

J6 Jennifer Cutler and **Aron Culotta**. Using weak supervision to scale the development of machine-learning models for social media-based marketing research. *Applied Marketing Analytics*, 5(2), 2019.

J7 Virgile Landeiro and **Aron Culotta**. Robust text classification under confounding shift. *Journal of Artificial Intelligence Research*, 63, 2018. (5 impact factor; 23 citations in Google Scholar).

J8 Ehsan Mohammady Ardehaly and **Aron Culotta**. Learning from noisy label proportions for classifying online social data. *Social Network Analysis and Mining*, 8(1):2–22, 2018. (2.3 impact factor; 12 citations in Google Scholar).

J9 Jennifer Cutler and **Aron Culotta**. Using online social networks to measure consumers' brand perception. *Applied Marketing Analytics*, 2(4):312–321, 2017.

J10 Libby Hemphill, **Aron Culotta**, and Matthew Heston. #Polar scores: Measuring partisanship using social media content. *Journal of Information Technology & Politics*, 1(1):1–13, 2016. (2.6 impact factor; 41 citations in Google Scholar).

J11 **Aron Culotta**. Training a text classifier with a single word using Twitter lists and domain adaptation. *Social Network Analysis and Mining*, 6(1):1–15, 2016. (2.3 impact factor).

J12 **Aron Culotta**, Nirmal Kumar Ravi, and Jennifer Cutler. Predicting Twitter user demographics using distant supervision from website traffic data. *Journal of Artificial Intelligence Research*, 55:389–408, 2016. (5 impact factor; 74 citations in Google Scholar).

J13 **Aron Culotta** and Jennifer Cutler. Mining brand perceptions from Twitter social networks. *Marketing Science*, 2016. (4.0 impact factor; 352 citations in Google Scholar).

J14 **Aron Culotta**, Jennifer Cutler, and Junzhe Zheng. Finding truth in cause-related advertising: A lexical analysis of brands' health, environment, and social justice communications on Twitter. *The Journal of Values-Based Leadership*, 8(2), 2015.

J15 **Aron Culotta**. Lightweight methods to estimate influenza rates and alcohol sales volume from Twitter messages. *Language Resources and Evaluation, Special Issue on Analysis of Short Texts on the Web*, 2013. (1.7 impact factor; 118 citations in Google Scholar).

J16 **Aron Culotta**, Trausti Kristjansson, Andrew McCallum, and Paul Viola. Corrective feedback and persistent learning for information extraction. *Artificial Intelligence*, 170:1101–1122, 2006. (5.1 impact factor; 102 citations in Google Scholar).

Refereed Conference Publications

C1 Shivaram, Karthik, Mustafa Bilgic, Matthew A Shapiro, and **Culotta, Aron**. Characterizing online criticism of partisan news media using weakly supervised learning. In *Proceedings of the International Conference on Web and Social Media*, 2024.

C2 Shivaram, Karthik, Mustafa Bilgic, Matthew A Shapiro, and **Culotta, Aron**. Forecasting political news engagement on social media. In *Proceedings of the International Conference on Web and Social Media*, 2024.

C3 Liu, Ping, Shivaram, Karthik, **Culotta, Aron**, Matthew A Shapiro, and Mustafa Bilgic. How does empowering users with greater system control affect news filter bubbles? In *Proceedings of the International Conference on Web and Social Media*, 2024.

C4 Linsen Li, **Aron Culotta**, Douglas N. Harris, and Nicholas Mattei. Online reviews are leading indicators of changes in k-12 school attributes. In *Proceedings of the ACM Web Conference*, 2023. (365/1900=19.2% accepted).

C5 Karthik Shivaram, Ping Liu, Matthew Shapiro, Mustafa Bilgic, and **Aron Culotta**. Reducing cross-topic political homogenization in content-based news recommendation. In *Proceedings of the 16th ACM Conference on Recommender Systems*, 2022. (39/231=26.9% accepted; 11 citations in Google Scholar).

C6 Xintian Li, Samiul Hasan, and **Aron Culotta**. Identifying hurricane evacuation intent on twitter. In *Proceedings of the International AAAI Conference on Web and Social Media*, volume 16, pages 618–627, 2022.

C7 Siva K Balasubramanian, Mustafa Bilgic, **Aron Culotta**, Libby Hemphill, Libby, Anita Nikolich, and Matthew A Shapiro. Leaders or followers? a temporal analysis of tweets from ira trolls. In *Proceedings of the International AAAI Conference on Web and Social Media*, volume 16, pages 2–11, 2022.

C8 Ping Liu, Karthik Shivaram, Matthew Shapiro, **Aron Culotta**, and Mustafa Bilgic. The interaction between political typology and filter bubbles in news recommendation algorithms. In *Proceedings of the Web Conference 2021*, 2021. (357/1736=20.6% accepted; 59 citations in Google Scholar).

C9 Zhao Wang and **Aron Culotta**. Robustness to spurious correlations in text classification via automatically generated counterfactuals. In *Proceedings of the Thirty Fifth National Conference on Artificial Intelligence (AAAI 2021)*, 2021. (1,692/7,911=21% accepted; 92 citations in Google Scholar).

C10 Zhao Wang and **Aron Culotta**. Identifying spurious correlations for robust text classification. In *Findings of the Association for Computational Linguistics: EMNLP 2020*, 2020. (66 citations in Google Scholar).

C11 Bahar Radfar, Karthik Shivaram, and **Aron Culotta**. Characterizing variation in toxic language by social context. In *Proceedings of the International AAAI Conference on Web and Social Media*, volume 14, pages 959–963, 2020. (21 citations in Google Scholar).

C12 Zhao Wang and **Aron Culotta**. When do words matter? Understanding the impact of lexical choice on audience perception using individual treatment effect estimation. In *Proceedings of the Thirty Third National Conference on Artificial Intelligence (AAAI 2019)*, 2019. (1150/7095=16% accepted); 14 citations in Google Scholar.

C13 Virgile Landeiro, Tuan Tran, and **Aron Culotta**. Discovering and controlling for latent confounds in text classification using adversarial domain adaptation. In *Proceedings of the SIAM International Conference on Data Mining (SDM19)*, 2019. (90/397=22.7% accepted).

C14 Virgile Landeiro and **Aron Culotta**. Collecting representative samples from a search engine by adaptive query generation. In *Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*, 2019.

C15 Tung Nguyen, Li Zhang, and **Aron Culotta**. Estimating tie strength in follower networks to measure brand perceptions. In *Proceedings of the 2019 International Symposium on Foundations and Applications of Big Data Analytics (ASONAM/FAB)*, 2019.

C16 Zhao Wang, Anna Sapienza, **Aron Culotta**, and Emilio Ferrara. Personality and behavior in role-based online games. In *Proceedings of the 2019 IEEE Conference on Games (COG)*, 2019. 17 citations in Google Scholar.

C17 Ping Liu, Joshua Guberman, Libby Hemphill, and **Aron Culotta**. Forecasting the presence and intensity of hostility on instagram using linguistic and social features. In *Proceedings of the Twelfth International AAAI Conference on Web and Social Media (ICWSM 2018)*, 2018. (48/295=16% accepted; 96 citations in Google Scholar).

C18 Ehsan Ardehaly and **Aron Culotta**. Mining the demographics of political sentiment from Twitter using learning from label proportions. In *Proceedings of the 17th IEEE International Conference on Data Mining (ICDM)*, 2017. (155/778=19.9% accepted; 20 citations in Google Scholar).

C19 Virgile Landeiro and **Aron Culotta**. Controlling for unobserved confounds in classification using correlational constraints. In *Proceedings of the Eleventh International AAAI Conference on Web and Social Media (ICWSM 2017)*, 2017.

C20 Shreesh Kumara Bhat and **Aron Culotta**. Identifying leading indicators of product recalls from online reviews using positive unlabeled learning and domain adaptation. In *Proceedings of the Eleventh International AAAI Conference on Web and Social Media (ICWSM 2017)*, 2017. (24 citations in Google Scholar).

C21 Ehsan Mohammady Ardehaly and **Aron Culotta**. Cold-start recommendations for audio news stories using matrix factorization. In *International Joint Conference on Artificial Intelligence (IJCAI)*, 2016. (573/2294=25% accepted).

C22 Ehsan Mohammady Ardehaly and **Aron Culotta**. Domain adaptation for learning from label proportions using self-training. In *International Joint Conference on Artificial Intelligence (IJCAI)*, 2016. (573/2294=25% accepted; 23 citations in Google Scholar).

C23 Virgile Landeiro and **Aron Culotta**. Robust text classification in the presence of confounding bias. In *Thirtieth National Conference on Artificial Intelligence (AAAI)*, 2016. (549/2132=26% accepted; 52 citations in Google Scholar).

C24 Ehsan Mohammady Ardehaly and **Aron Culotta**. Inferring latent attributes of Twitter users with label regularization. In *Human Language Technology Conference of the North American Chapter of the Association of Computational Linguistics (HLT/NAACL)*, 2015. (117/402=29% accepted; 32 citations in Google Scholar).

C25 Virgile Landeiro Dos Reis and **Aron Culotta**. Using matched samples to estimate the effects of exercise on mental health from Twitter. In *Twenty-ninth National Conference on Artificial Intelligence (AAAI)*, 2015. (531/1991=27% accepted; 65 citations in Google Scholar).

C26 **Aron Culotta**, Nirmal Ravi Kumar, and Jennifer Cutler. Predicting the demographics of Twitter users from website traffic data. In *Twenty-ninth National Conference on Artificial Intelligence (AAAI)*, 2015. (531/1991=27% accepted, **Outstanding Paper Honorable Mention** (given to 1 of 531 accepted papers); 216 citations in Google Scholar).

C27 **Aron Culotta**. Reducing sampling bias in social media data for county health inference. In *JSM Proceedings*, 2014. (52 citations in Google Scholar).

C28 Maria E Ramirez-Loaiza, **Aron Culotta**, and Mustafa Bilgic. Anytime active learning. In *Twenty-eigth National Conference on Artificial Intelligence (AAAI)*, 2014. (398/1406=28% accepted; 14 citations in Google Scholar).

C29 Zahra Ashktorab, Christopher Brown, Manojit Nandi, and **Aron Culotta**. Tweedr: Mining Twitter to inform disaster response. In *the 11th International Conference on Information Systems for Crisis Response and Management (ISCRAM)*, 2014. (46% accepted; 352 citations in Google Scholar).

C30 **Aron Culotta**. Estimating county health statistics with Twitter. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI)*, 2014. (23% accepted; 195 citations in Google Scholar).

C31 Reid Priedhorsky, **Aron Culotta**, and Sara Y. Del Valle. Inferring the origin location of tweets with quantitative confidence. In *17th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW)*, 2014. (134/497=27% accepted; **Best Paper Honorable Mention** (given to 15 of 134 accepted papers); 141 citations in Google Scholar).

C32 Michael Wick, Khashayar Rohanimanesh, Kedar Bellare, **Aron Culotta**, and Andrew McCallum. Samplerank: Training factor graphs with atomic gradients. In *Proceedings of the International Conference on Machine Learning (ICML)*, 2011. (152/589=26% accepted; 64 citations in Google Scholar).

C33 Michael Wick, **Aron Culotta**, Khashayar Rohanimanesh, and Andrew McCallum. An entity-based model for coreference resolution. In *SIAM International Conference on Data Mining (SDM)*, 2009. (55/351=16% accepted; 57 citations in Google Scholar).

C34 **Aron Culotta**, Michael Wick, Robert Hall, Matthew Marzilli, and Andrew McCallum. Canonicalization of database records using adaptive similarity measures. In *Proceedings of the 13th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD)*, San Jose, CA, 2007. (92/513=18% accepted; 32 citations in Google Scholar).

C35 **Aron Culotta**, Michael Wick, Robert Hall, and Andrew McCallum. First-order probabilistic models for coreference resolution. In *Human Language Technology Conference of the North American Chapter of the Association of Computational Linguistics (HLT/NAACL)*, pages 81–88, 2007. (72/298=24% accepted; 234 citations in Google Scholar).

C36 Michael Wick, **Aron Culotta**, and Andrew McCallum. Learning field compatibilities to extract database records from unstructured text. In *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 603–611, Sydney, Australia, 2006. (18% accepted; 46 citations in Google Scholar).

C37 **Aron Culotta**, Andrew McCallum, and Jonathan Betz. Integrating probabilistic extraction models and data mining to discover relations and patterns in text. In *Human Language Technology Conference of the North American Chapter of the Association of Computational Linguistics (HLT/NAACL)*, pages 296–303, New York, NY, June 2006. (62/257=24% accepted; 295 citations in Google Scholar).

C38 **Aron Culotta** and Andrew McCallum. Joint deduplication of multiple record types in relational data. In *2005 ACM International Conference on Information and Knowledge Management (CIKM)*, pages 257–258, 2005. (106/425=25% accepted; 113 citations in Google Scholar).

C39 **Aron Culotta** and Andrew McCallum. Reducing labeling effort for structured prediction tasks. In *The Twentieth National Conference on Artificial Intelligence (AAAI)*, pages 746–751, Pittsburgh, PA, 2005. (148/803=18% accepted for oral presentation; 548 citations in Google Scholar).

C40 **Aron Culotta** and Jeffery Sorensen. Dependency tree kernels for relation extraction. In *42nd Annual Meeting of the Association for Computational Linguistics (ACL)*, Barcelona, Spain, 2004. (88/348=25% accepted; 1169 citations in Google Scholar).

C41 Trausti Kristjannson, **Aron Culotta**, Paul Viola, and Andrew McCallum. Interactive information extraction with constrained conditional random fields. In *Nineteenth National Conference on Artificial Intelligence (AAAI)*, San Jose, CA, 2004. (121/453=26% accepted, **Outstanding Paper Honorable Mention** (given to 2 of 121 accepted papers); 214 citations in Google Scholar).

C42 **Aron Culotta** and Andrew McCallum. Confidence estimation for information extraction. In *Human Language Technology Conference of the North American Chapter of the Association for Computational Linguistics (HLT/NAACL)*, Boston, MA, 2004. (43/168=26% accepted; 167 citations in Google Scholar).

C43 **Aron Culotta**, Ron Bekkerman, and Andrew McCallum. Extracting social networks and contact information from email and the web. In *First Conference on Email and Anti-Spam (CEAS)*, Mountain View, CA, 2004. (35% accepted; 394 citations in Google Scholar).

Refereed Workshop Publications

W1 Xintian Li and **Aron Culotta**. Forecasting covid-19 vaccination rates using social media data. In *Proceedings of the SocialNLP Workshop at the ACM Web Conference*, 2023.

W2 **Aron Culotta**, Ginger Zhe Jin, Yidan Sun, and Liad Wagman. Safety reviews on airbnb: An information tale. In *The Platform Strategy Research Symposium*, 2022.

W3 Wang, Zhao, Kai Shu, and Aron Culotta. Enhancing model robustness and fairness with causality: A regularization approach. In *EMNLP First Workshop on Causal Inference & NLP*, 2021. (27 citations in Google Scholar).

W4 Ehsan Ardehaly and **Aron Culotta**. Co-training for demographic classification using deep learning from label proportions. In *Proceedings of the ACUMEN Workshop at the 17th IEEE International Conference on Data Mining (ICDM)*, 2017. (68 citations in Google Scholar).

W5 Zhao Wang, Jennifer Cutler, and **Aron Culotta**. Are words commensurate with actions? Quantifying commitment to a cause from online public messaging. In *Proceedings of the ACUMEN Workshop at the 17th IEEE International Conference on Data Mining (ICDM)*, 2017.

W6 **Aron Culotta**. Towards identifying leading indicators of smoking cessation attempts from social media. In *Workshop on Computational Health Science at the IEEE International Conference on Healthcare Informatics*, 2016.

W7 Virgile Landeiro and **Aron Culotta**. Reducing confounding bias in observational studies that use text classification. In *AAAI Spring Symposium on Observational Studies through Social Media and Other Human-Generated Content*, 2016.

W8 Elaine Cristina Resende and **Aron Culotta**. A demographic and sentiment analysis of e-cigarette messages on Twitter. In *Workshop on Computational Health Science at the 6th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics*, 2015.

W9 Ehsan Mohammady and **Aron Culotta**. Using county demographics to infer attributes of Twitter users. In *ACL Joint Workshop on Social Dynamics and Personal Attributes in Social Media*, 2014. (86 citations in Google Scholar).

W10 Maria E. Ramirez-Loaiza, **Aron Culotta**, and Mustafa Bilgic. Towards anytime active learning: Interrupting experts to reduce annotation costs. In *KDD Workshop on Interactive Data Exploration and Analytics (IDEA)*, 2013. (10 citations in Google Scholar).

W11 Francisco Iacobelli and **Aron Culotta**. Too neurotic, not too friendly: Structured personality classification on textual data. In *ICWSM Workshop on Personality Classification*, 2013. (32 citations in Google Scholar).

W12 Benjamin Mandel, **Aron Culotta**, John Boulahanis, Danielle Stark, Bonnie Lewis, and Jeremy Rodrigue. A demographic analysis of online sentiment during Hurricane Irene. In *NAACL-HLT Workshop on Language in Social Media*, 2012. (229 citations in Google Scholar).

W13 **Aron Culotta**. Towards detecting influenza epidemics by analyzing Twitter messages. In *KDD Workshop on Social Media Analytics*, 2010. (**887 citations** in Google Scholar).

W14 Michael Wick, Khashayar Rohanimanesh, **Aron Culotta**, and Andrew McCallum. Samplerank: Learning preferences from atomic gradients. In *Neural Information Processing Systems (NIPS) Workshop on Advances in Ranking*, 2009. (31 citations in Google Scholar).

W15 **Aron Culotta**, Pallika Kanani, Robert Hall, Michael Wick, and Andrew McCallum. Author disambiguation using error-driven machine learning with a ranking loss function. In *Sixth International Workshop on Information Integration on the Web (IIWeb-07)*, Vancouver, Canada, 2007. (123 citations in Google Scholar).

W16 **Aron Culotta** and Andrew McCallum. Tractable learning and inference with high-order representations. In *International Conference on Machine Learning Workshop on Open Problems in Statistical Relational Learning*, Pittsburgh, PA, 2006. (19 citations in Google Scholar).

W17 **Aron Culotta** and Andrew McCallum. Practical markov logic containing first-order quantifiers with application to identity uncertainty. In *Human Language Technology Workshop on Computationally Hard Problems and Joint Inference in Speech and Language Processing (HLT/NAACL)*, June 2006. (12 citations in Google Scholar).

W18 **Aron Culotta** and Andrew McCallum. Learning clusterwise similarity with first-order features. In *Neural Information Processing Systems (NIPS) Workshop on the Theoretical Foundations of Clustering*, Whistler, B.C., December 2005.

Unrefereed Workshop Publications

U1 **Aron Culotta**, Andrew McCallum, Bart Selman, and Ashish Sabharwal. Sparse message passing algorithms for weighted maximum satisfiability. In *New England Student Colloquium on Artificial Intelligence (NESCAI)*, Ithaca, NY, 2007.

Technical Reports

TR1 Libby Hemphill, Aron Culotta, and Matthew Heston. Framing in social media: How the US congress uses twitter hashtags to frame political issues. Technical report, 2013. (99 citations in Google Scholar).

TR2 **Aron Culotta**. Detecting influenza epidemics by analyzing Twitter messages. Technical report, July 2010. (147 citations in Google Scholar).

TR3 **Aron Culotta** and Andrew McCallum. A conditional model of deduplication for multi-type relational data. Technical Report IR-443, University of Massachusetts, September 2005. (14 citations in Google Scholar).

TR4 **Aron Culotta**, David Kulp, and Andrew McCallum. Gene prediction with conditional random fields. Technical Report UM-CS-2005-028, University of Massachusetts, Amherst, April 2005. (58 citations in Google Scholar).

TR5 **Aron Culotta**. Maximizing cascades in social networks. Technical report, University of Massachusetts, 2003. (14 citations in Google Scholar).

Dissemination

Popular Press Mentions of Research

- Profile of CEAI in the Tulanian [link], 2024
- "Court watchers hope Baton Rogue program can educate public about issues in legal system". Article describing our work with Court Watch NOLA[link], 2024
- "Decoding our chatter", Robert Lee Hotz, *Wall Street Journal*. October 1, 2011.
- "Twitter and Disease Control: The Limits of Algorithmic Prediction". Jared Keller, *TheAtlantic.com*. October 26, 2010.
- "Twitter as Medium and Message", Neil Savage, *Communications of the ACM*. Vol. 54 No. 3, Pages 18–20. 2011.
- "Tracking the flu by tracking tweets", Elizabeth Armstrong Moore, *CNET News*. September 29, 2010.

Invited Talks and Panels

- Distinguished Lecturer, Tulane Research, Innovation, and Creativity Summit, "Artificial Intelligence for Social Impact", 04/2024
- Invited speaker, "AI for the people: Unleashing the power of community-engaged AI," Amherst College, 4/2024
- Invited speaker, "Improving Transparency and Equitability in Criminal Court with AI.", Loyola Law Symposium, 3/2024
- Invited speaker, Lambeth House, seminar on Artificial Intelligence (with N. Mattei), 01/2024
- Panelist "Hacking your minds: Weapons of Influence", Tulane Library, 10/2023
- Panelist, GNO Inc.'s Workforce Summit, "AI is here. What does this mean for training, learning, and the availability of jobs?", 9/2023
- Panelist: "Revolutionizing Higher Education: Exploring the Transformative Power of ChatGPT", Tulane, 3/7/2023
- "Learning about society by mining the web," UIC 2019 CRIM Symposium, 3/20/2019
- "Observational studies over social media with machine learning," Toyota Technology Institute Colloquium, Chicago, 5/22/2017
- "Text classification in the wild," University of Chicago Training Program in Applied Analytics, 3/24/2017
- **Tutorial:** "Mining Personal Traits in Social Media," SIAM International Conference of Data Mining, Miami, FL, 5/5/2016
- "Towards classifier-driven observational studies from social media," Univ. of Chicago, Harris School of Public Policy, 4/27/2016
- "Confounding bias in text classification," AAAI Spring Symposium on Observational Studies through Social Media, 3/21/2016, Stanford University
- "Dealing with confounding variables in web-based health studies," Loyola University, Big Boulder Workshop on Using Social Data for Social Good, 11/6/2015
- "Identifying and controlling for confounders in social media analysis," Northwestern University, Computational Social Science Summit, 5/17/2015
- "Towards web-scale observational studies of health," Johns Hopkins University, Center for Language and Speech Processing, Baltimore, MD, 3/6/2015
- "Investigating public health using Twitter," University of Illinois, Institute for Health

Research and Policy, Chicago, IL, 11/4/2014
- "Understanding public health using Twitter," DePaul University, Chicago, IL, 9/12/2014
- "Addressing selection bias in social media for estimating county health statistics," Joint Statistical Meetings, Boston, MA, 8/4/2014
- "Health Informatics and Social Media", Environmental Protection Agency, Cincinnati, OH, 9/23/2013
- "Health Informatics and Disaster Planning using Social Media Analysis", Los Alamos National Labs, Los Alamos, NM, 7/6/2012
- "Health Informatics and Disaster Planning using Social Media Analysis", **Keynote Speaker**, International Field Directors and Technologies Conference (IFD&TC), Orlando, FL, 5/22/2012
- "Health Informatics and Disaster Planning using Social Media Analysis", National Opinion Research Center at the University of Chicago, Chicago, IL 4/9/2012
- "Health Informatics and Disaster Planning using Social Media Analysis", Tulane University Computer Science Seminar Series, New Orleans, LA 3/2/2012

Teaching Experience

- Extensive experience developing innovative curricula in artificial intelligence, data science, and natural language processing.
- Since 2020, 5 new course preps, 4 new course developments/redesigns, including 2 online MS courses. Formal instruction to >30 students per semester, on average.
- 4 graduated PhD students (now at Amazon, U of Chicago, and AI startups); 3 current PhD students (ABD, prospectus, pre-qualifier stages). Several cross-disciplinary advising, including 3 PhD Committees (2 SPHTM, 1 EES) and independent studies.
- 2-3 Senior Capstone projects mentored per year (6-8 students), plus undergraduate thesis advising.
- Introduced Service Learning section of Senior Capstone, leading students in AI/DS projects to help local non-profits in criminal justice, civic transparency, and education.

Courses at Tulane University (2020-):

- CMPS 2200 Introduction to Algorithms [link]
- CMPS 3140/6140 Introduction to Artificial Intelligence
- CMPS 3160/6160 Introduction to Data Science
- CMPS 4010/4020 Capstone Project I & II
- CMPS 4620/6620 Artificial Intelligence
- CMPS 4730/6730 Natural Language Processing [link]
- CMPS 4890 Service Learning [link]
- CMPS 7980 Natural Language Processing Independent Study (for Public Health PhD Student)

- With Ram Mettu, complete redesign of CMPS 2200 to emphasize parallel algorithms; introduced numerous technologies, including repl.it and GitHub classroom for pair programming.
- Complete overhaul of CMPS 4730/6730 (NLP) to focus on modern neural network approaches.
- Created a Service Learning section for CMPS 4010/4020 to lead capstone projects that collaborate closely with local non-profits on data science / AI projects: https://tulanecs.github.io/cmps4890/

- Developed online version of CMPS 6620 (AI) and CMPS 6730 (NLP) for Online MSCS program.

Courses at Illinois Institute of Technology (2013-2020):

- CS429 Information Retrieval [link] — Spring 2014-2016
- CS579 Online Social Network Analysis [link] — Fall 2014-2019 Spring 2018
- CS585 Natural Language Processing [link] — Spring 2017
- CS595 Machine Learning and Social Media [link] — Fall 2013

I introduced and designed CS579 (and the CS595 that preceded it). For CS429 and CS585, I performed a significant redesign of the course.

Student evaluations

Term	Course	Enrolled	Responses	Instructor	Course
Fall 2020	CMPS2200: Intro to Algorithms	23	n/a*	n/a*	n/a*
Spring 2021	CMPS4730/6730: Natural Language Processing	12	5	4.6	4.6
Fall 2021	CMPS4620/6620: Artificial Intelligence	12	7	4.86	5
Spring 2022	CMPS3140:/6140: Intro to Artificial Intelligence	33	29	4.66	4.34
Spring 2022	CMPS4890: Service Learning	5	n/a	n/a	n/a
Fall 2022	CMPS3160/6160: Intro to Data Science	36	31	4.77	4.61
Fall 2023	CMPS3160/6160: Intro to Data Science	36	28	4.82	4.71
Spring 2024	CMPS4730/6730: Natural Language Processing	29	12	4.83	4.83
Spring 2024	CMPS6620: Artificial Intelligence	22	12	4.5	4.58
	total	208	**average**	**4.72**	**4.67**

*Teaching evaluation system this semester merged responses from two sections,, making it impossible to disaggregate feedback between instructors.

In addition to regular teaching duties, I annually mentor 2-3 Senior Capstone projects (CMPS 4010/4020):

Term	Project	Enrolled	Students
Fall 2020-Spring 2021	Detecting Gender Bias in Reference Letters	3	J Baggett, L Kuperman, L Sussman
	Analyzing Protests from Online Media	2	L Hardy, S Rothman
Fall 2021-Spring 2022	Court Watch NOLA Dashboard	4	B Kahn, I Keshishian, S Fox, V Li
	Families Helping Families Chatbot	3	G Darley, A Messing, D Ngo
Fall 2022-Spring 2023	Court Watch NOLA Dashboard	4	J Licht, A Schoeny, E Sollendar, M Long
	Course Recommendation System	1	J Lehner
Fall 2023-Spring 2024	Criminal Court Bond Prediction	2	W Rodman, B Solansky
	Real Estate Sales Prediction	3	L Albright, L Janko, J Manzer
	City Council Chatbot	3	C Brooks, H Outlaw, M Sison
Fall 2024-Spring 2025	Criminal Court Analytics	4	E Moses, C O'Bert, C Porier, T Simms
	City Council Chatbot	4	S Feldman, C Riviere, A Scarry, Z Wiel
	total	33	(6.6/year)

Between traditional courses and capstone mentoring, I instruct ∼32 students on average per semester.

Student Research Advising

PhD Students

Graduated:

- Karthik Shivaram, 2018-2023 , "Filter Bubbles and Algorithmic Personalization for News Recommendation," Now: Lead Machine Learning Engineer, Wizard AI
- Zhao Wang, 2016-2021 , "Language, Perception, and Causal Inference in Online Communication", Now: Assistant Instructional Professor, University of Chicago

- Virgile Landeiro Dos Reis, 2014-2018 , "Removing confounding bias in text classification", Now: Machine Learning Engineer at Amazon
- Ehsan Mohammady Ardehaly, 2013-2017, "Lightly supervised machine learning for classifying online social data" Now: Data Scientist, CCC Information Services

Current:

- Xintian Li, 2018- , "Geographical Adaptation of Language Models in Social Media" (expected graduation: 2024)
- Linsen Li, 2021- (co-advising with Nick Mattei), "Causal Inference with Text"
- Kory Rosen, 2024-

Co-Advising / Mentorship:

- Simone Skeen (Tulane Public Health), 2023, "Understanding mental health and Long-Covid from online data"
- Lan Wei, 2018-2019 , "Measuring perception in online social networks"
- Ping Liu "Cyberbullying forecasting," 2016-2017 (one year collaboration for Nayar Prize)

Master's Students (Theses and Projects)

- Shreesh Bhat, "Forecasting product recalls from reviews"
- Rojin Babayan, "Studying immigration through Twitter"
- Michael Drews, "Sports Summarization with Natural Language Generation"
- Olivier Dutfoy, "Fantasy sports forecasting"
- Chihung Hsieh, "Airport wait time estimation using social media"
- Ai Jiang, "Estimating effects of health ads on smoking"
- Mayuri Kadam, "Detecting false health claims online"
- Chandra Kumar, "Image analysis for cyberbullying"
- Silambarasan Madanakumar, "Brand similarity on Twitter"
- Karthik Mani, "Text summarization with Deep learning"
- Harsh Parikh, "Inferring demographics from images"
- Lola Priego, "Financial Prediction from Twitter"
- Thomas Theissier, "Interactive labeling of tweets for classification"
- Bahar Radfar, "Modeling tie strength and online aggression"
- Nirmal Kumar Ravi, "Inferring user demographics from Twitter"
- Than Nguyen, "Removing demographic bias in medical diagnosis systems"
- Victor Saint Guilhem, "Tracking French politics on Twitter"
- Carol Schmitz, "Detecting verbal violence online"
- Cyril Trosset, "Estimating Twitter Demographics"
- Xinzhou Yan, "Learning from label proportions while preserving privacy"
- Sahand Zeinali, "Understanding marijuana use from online content"
- Junzhe Zheng, "Identifying impostors in social media"

Undergraduate Students

In addition to Senior Capstone projects, I also advise undergraduate honor's theses and independent studies:

- Olivia Meyer, "Analyzing 701 Release Laws in Orleans Criminal Court" (Honors Thesis, 2024)
- Sydney Feldman, "Visualizing Artistic Networks," NEH-funded project (2024)
- Caroline Casella, "Visualizing Artistic Networks," Newcomb Institute-funded project (2023)
- Batu El, "Fairness with respect to age in screening algorithms" (Honors Thesis 2023)
- Tum-Tum Adeleye, "Algorithmic Fairness in Public Health" Tulane Research & Innovation Award
- Daniel Ralph, "Filter Bubbles in Online Networks" Tulane Research & Innovation Award
- Xiao Huang, "Twitter bot detection" *github.com/tapilab/is-xhuang1994*

- Yiming Guo, "Identifying hyped memes online" *github.com/tapilab/is-prefixlt*
- Tung Nguyen, "Estimating Tie Strength in Follower Networks to Measure Brand Perceptions"
- Filipe Tabosa, "Personality and Music Tastes" *github.com/tapilab/filipe*
- Tuan Tran, "Controlling for Latent Confounds with Adversarial Domain Adaptation"
- Elaine Resende, "Analysis of e-cigarette messages on Twitter" *github.com/tapilab/chs-2015-ecig*
- Emily Warman, "Understanding demographics of e-cigarette usage"

Thesis committees

- **PhD**: Taotao Jing (A. Ding, CS), Alan Braeley (J. Whitten, EES), Maria Santos (S. Ley, SPHTM) Simone Skeen (K. Theall, SPHTM), Di Ma (G. Agam, CS), Maria Ramirez-Loaiza (M. Bilgic, CS), Caner Komurlu (M. Bilgic, CS), Dane Wilburne (S. Petrovic, Applied Math), Xi Rao (L. Hemphill, Humanities), Andrew Roback (L. Hemphill, Humanities), Daniel Giles (S. Laurent-Muehleisen, Physics), Junze Han (X.Y. Li / P.J. Wan, CS)
- **MS**: Matthew Heston (L. Hemphill, Humanities), Mayuri Kadam (A. Culotta), Sahand Zeinali (A. Culotta)
- **BS**: Olivia Meyer, Xiao Huang (A. Culotta), Yiming Guo (A. Culotta)

Service Activities

Events

- **Organizer:** "Lunch & Learn Series on Community-Engaged Artificial Intelligence", a Tulane seminar series convening scholars working on AI for social impact; Spring 2024 - present
- **Co-Organizer:** (with ULL faculty): "Exploring the Transformative Impact of Applied AI on Health Outcomes", 4/23/2024, a workshop to foster industry-university research, Ochsner Health
- **Co-Organizer:** (with CEAI faculty): "Artificial Intelligence: Risks and Benefits for Local Communities", 4/28/2023, a community workshop, Tulane
- **Co-Organizer:** (with Nick Mattei, Jihun Hamm, Brian Summa, and others): Gulf Coast AI Social at NeurIPS, 12/2022 and 12/2023
- **Organizer:** Planning Workshop, "Center for Applied Artificial Intelligence", part of IUCRC program, 10/27/2022
- **Co-Organizer:** (with Nick Mattei, Edson Cabalfin): "Data x Community x Design", 4/28/2022, a community workshop, Tulane
- **Organizer:** Artificial Intelligence Employer Roundtable, GNO, Inc., 3/28/2022
- **Workshop Organizer**, WSDM 2017 Workshop on Mining Online Health Reports

Professional Service

- **Proposal Review Panelist:** NSF Smart and Connected Health, NSF Fairness in AI, NSF Small Business Innovation Research programs, NEH Digging into Data Challenge
- **Action Editor:** Association for Computational Linguistics Rolling Review, 2021-
- **Program co-Chair:** ICWSM 2020
- **Steering Committee:** ICWSM
- **Faculty Mentor:** ICWSM
- **Area Chair and Senior Program Committees:** AAAI (2017-), ICHI (2017-), IJCAI (2019-), ICWSM (2019-)
- **Panelist**, National Science Foundation, IIS and CCF
- **Managing Editor**, Journal of Machine Learning Research, 2008-2018
- **Editor**, Journal of Medical Internet Research, Special Issue on Mining Health Reports, 2017-
- **Publications Chair**, Neural Information Processing Systems Conference, 2009-2011
- **Online Proceedings Chair**, Neural Information Processing Systems Conference, 2007-2011
- **Program Committee:** AAAI, ACL, CoNLL, ICML, IJCAI, KDD, NAACL/HLT, NLP4Science Workshop

- **Reviewing:** NIPS, UAI, AISTATS, IEEE Trans. on Knowledge Engineering, IEEE Trans. on Audio, Speech and Language Processing, IEEE Trans. on Information Systems.

University Service

In addition to typical department and school service, I have also developed undergrad and graduate AI degrees (IIT); served on the committee to establish a School of Computing at IIT; chaired the search committee for 4 tenure-track hires in CS (2021-2024); and served on Tulane University committees to establish a Data Science institute, to guide AI research initiatives, and to advise investments in computational infrastructure for AI research.

Tulane University (2020-):

- **University Service:**
  - Provost's Committee on Generative AI for Research, Member (2023-2024): Helped shape university strategy for how to leverage Generative AI for transforming academic research.
  - Tulane High Performance Computing Planning Committee, Member (2024-): Advise IT on hardware investments to support AI research
  - Tulane Innovation Institute, Expert Judge, Pitch Competition (2022, 2023)
  - Data Hub Implementation Committee (2022-)
  - Data Literacy Quality Enhancement Plan Committee (2021-2022): Helped guide the creation of new initiatives to expand data science education and research across the university (resulting in the Connolly Alexander Institute for Data Science).
- **School of Science and Engineering Service:**
  - SSE Promotion and Tenure Committee (2023-2025)
  - SSE Graduate Studies Committee (2022-2023)
  - SSE Strategic Initiatives Committee (2022-)
- **Department of Computer Science Service:**
  - CS Faculty Search Chair (2021-2024)
  - CS Promotion and Tenure Committee (2020-)
  - CS Graduate Studies Committee (2020-)
  - CS Committee of Processes (2024-)

Illinois Institute of Technology (2013-2020):

- **University Service:**
  - College of Computing study committee, 2017-2020
  - AI Ethics Working Group Co-Chair, 2019-2020
  - CAMRAS scholarship interviewer, 2018
- **Department of Computer Science Service:**
  - co-Director, B.S. in Artificial Intelligence
  - co-Director, Masters in Artificial Intelligence
    - helped develop and launch two new Artificial Intelligence degrees
  - Graduate studies committee, 2013-2018
  - Undergraduate studies committee, 2019-2020
  - Seminar and DLS co-coordinator, 2014-2020
  - Faculty search committee, 2016-2019
  - Admissions committee, 2015-2016