New Directions in Analyzing Text as Data 2023

University of Massachusetts Amherst
November 9–10, 2023
https://tada2023.org

Thursday, November 9, 2023

8:00am	Continental Breakfast Commonwealth Honors College Events Hall
9:00am	Welcome Remarks
9:15am	***Social Media in China & Taiwan*** China's Global Voice: A Multimodal Analysis of Image and Text Propaganda Strategies. *Author*: Hannah Bailey (Oxford). Narratives of Foreign Media Ecosystems in Chinese Social Media Discussions of the Russo-Ukrainian War. *Authors*: Hans Hanley (Stanford), Yingdan Lu (Northwestern), and Jennifer Pan (Stanford). Characterizing the 2024 Taiwanese Presidential Elections on the News and Social Media. *Authors*: Sunny Fang (Barnard) and Herbert Chang (Dartmouth). *Discussant*: Brandon Stewart (Princeton)
10:30am	Break
10:45am	***The Lifecycles of Text Data:*** ***A discussion on access, circulation, & control*** Ethan Zuckerman. *Panelist.* Associate Professor of Public Policy, Communication, and Information (UMass Amherst); Founder, Institute for Digital Public Infrastructure. Gregory Crane. *Panelist.* Professor and Winnick Family Chair in Technology & Entrepreneurship (Tufts University), Editor in Chief, Perseus Digital Library. Laure Thompson, *Moderator.* Assistant Professor, UMass Amherst.
12:00pm	Lunch, including doctoral consortium mentoring.

1:00pm	**_Cultural Analytics_**

Topic, Genre, Race: Computational Approaches to the Lyrical History of Blackface Minstrelsy. *Authors*: Samuel Backer and Tom Lippincott (Johns Hopkins).

Using Austen's Characters to Evaluate Computational Pipelines for Literature. *Authors*: Funing Yang (Microsoft) and Carolyn Jane Anderson (Wellesley).

Mapping Inventions in the Space of Ideas, 1836–2022: Representation and Measurement. *Authors*: Ina Ganguli (UMass), Jeff Lin (Federal Reserve Bank of Philadelphia), Vitaly Meursault (Federal Reserve Bank of Philadelphia), Nicholas Reynolds (Essex).

Discussant: Maria Antoniak (Allen Institute for AI)

2:15pm	Break

2:30pm	**_LLMs & Annotation_**

Using Imperfect Surrogates for Downstream Inference: Design-based Supervised Learning for Social Science Applications of Large Language Models. *Authors*: Naoki Egami (Columbia), Musashi Hinck (Princeton), Brandon Stewart (Princeton), and Hanying Wei (Columbia).

Mapping Subjectivity in Press Discourse: Human vs. Transformer Comprehension of Belgian French Press Articles. *Authors*: Louis Escouflaire, Jérémie Bogaert, Antonin Descampe, and Cédrick Fairon (UCLouvain).

Automated Annotation with Generative AI Requires Validation. *Authors*: Nicholas Pangakis, Sam Wolken, and Neil Fasching (Penn).

Discussant: Katherine Keith (Williams College)

3:45pm	Break & Move to Campus Center Hotel

4:15pm	**_Poster Session I_** Amherst Room, Campus Center Hotel (Cash Bar)

5:15pm	End of day, dinner on your own

Friday, November 10, 2023

8:30am | Continental Breakfast
Amherst Room, Campus Center Hotel

8:45am | *Poster Session II*
Amherst Room, Campus Center Hotel

9:45am | Break & Walk to Commonwealth Honors College Events Hall

10:15am | *LLMs*

Large Language Models Can Argue in Convincing and Novel Ways About Politics: Evidence from Experiments and Human Judgement. *Authors*: Alexis Palmer (NYU) and Arthur Spirling (Princeton).

Applying Linguistic Theory to Large Language Models: Using Speech Act Theory to Understand How Language Causes Representational Harms. *Authors*: Emily Corvi, Stefanie Reed, Hannah Washington, Chad Atalla, Emily Sheng, Dan Vann, and Hanna Wallach (Microsoft).

How well do pretrained LLMs handle variant literary orthography? *Authors*: Craig Messner, Tom Lippincott (Johns Hopkins).

Discussant: Philip Resnik (Maryland)

11:30am | Break

11:45am | *Text Measurement and Application*

Words as Gatekeepers: Measuring Discipline-specific Terms and Meanings in Scholarly Publications. *Authors*: Li Lucy (UC Berkeley), Jesse Dodge (Allen Institute), David Bamman (UC Berkeley), and Katherine Keith (Williams).

Understanding Personal Drug Experiences Shared on Reddit: A Multilabel Classification System for Addiction Recovery Research. *Authors*: Layla Bouzoubaa and Shadi Rezapour (Drexel).

From text to measure: Creating trustworthy measures of latent concepts from text with supervised machine learning. *Authors*: Ju Yeon Park (Ohio State) and Jacob Montgomery (Washington University in St. Louis).

Discussant: Kelsey Shoub (UMass Amherst)

1:00pm | Closing Remarks & Lunch
A boxed lunch will be available. For those flying out earlier, it's approximately 55 minutes to Bradley Airport (Hartford).

Poster Session I. Thursday, 4:15pm.

Farewell Victoria: Quantifying the Value of Foreign Names. Zhaowen Guo (Washington); Chenyue Cao (Chicago)

Are Women's Works and Claims Received with More Uncertainty? Jina Lee (Arizona)

You Are What You Annotate: Towards Better Models through Annotator Representations. Naihao Deng, Siyang Liu, Xinliang Frederick Zhang, Winston Wu, Lu Wang, Rada Mihalcea (Michigan)

Topics, Authors, and Networks in Large Language Model Research: Trends from 17K arXiv Papers. Rajiv Movva, Sidhika Balachandar, Kenny Peng, Gabriel Agostini, Nikhil Garg, Emma Pierson (Cornell)

Populism and Polarization in Comparative Perspective. Yujin Julia Jung (Missouri)

Decreasing the human coding burden in randomized trials with text-based outcomes via model-assisted impact analysis. Reagan Mozer (Bentley), Luke Miratrix (Harvard)

Evaluating the impact of lexical gender bias on gender bias measurement with word embeddings. Shintaro Sakai (Nagoya University)

Combining GPT Annotations and Vector Search Methods to Measure Obstructive Speech in Legislatures. Mitchell Bosley (Michigan)

Gendering the Subject in TED Talks. K.M. Kinnaird (Smith), Allison J.B. Chaney (Researcher), John Laudun (Louisiana)

Towards Personalistic Rule: Evidence from Textbooks in China. Rosemary Pang (UMass Amherst), Yuehong Cassandra Tai (Penn State), Erico Yu (UMass Amherst)

Safety Regulation in the U.S. Poultry Industry: For Whom? Bridget Diana (UMass Amherst)

A Monte Carlo Language Model Pipeline for Zero-Shot Sociopolitical Event Extraction. Erica Cai (UMass Amherst), Brendan O'Connor (UMass Amherst)

On nonprofits and neoliberalism: computational approaches to the study of ideology. Isaac Dalke (UC Berkeley)

Creating Custom Event Data Without Dictionaries: A Bag-of-Tricks. Andrew Halterman (Michigan State), Philip A. Schrodt (Parus Analytics), Andreas Beger (Basil Analytics), Benjamin E. Bagozzi (Delaware), Grace I. Scarborough (Leidos)

Improving Mental Health Classifier Generalization with Pre-Diagnosis Data. Yujian Liu (UC Santa Barbara), Laura Biester (Middlebury), Rada Mihalcea (Michigan)

Inclusion-Moderation Hypothesis Reconsidered: Evidence from Erdogan's Political Speech.

Humeyra Biricik (Oxford)

Independencies in Causal Graphs with Text Variables: Embeddings vs. Frequencies. Angus Li (Williams), Katie Keith (Williams)

Manifesting a Coup: Cross-Website Extremism and Violence on the Dot Win Network Prior to January 6, 2021. Alex Newhouse (Colorado), Meghan Conroy (Digital Forensics Research Lab)

Cheep Talk: Investigating Corporate Social Responsibility Speech on Twitter. Nile Phillips (Harvey Mudd), Michelle Lum (Harvey Mudd), Manisha Goel (Pomona), Michelle Zemel (Pomona), Alexandra Schofield (Harvey Mudd)

Discovering Works in Historic and Hybrid Languages with Language Models. Hale Sirin (Johns Hopkins), Ali Bolcakan (Michigan), Tom Lippincott (Johns Hopkins)

Exploring shifts in women-directed stereotypes across Wikipedia time periods. Cheryl Wang (Amazon), Carolyn Jane Anderson (Wellesley)

The traces of repression. Recovery and processing of military archives produced during the Uruguayan dictatorship (1973-1985). Elina Gomez (Universidad de la Republica de Uruguay)

A Narrative Graph Approach for Analyzing Framing in News Articles. Aditya Chandra (Colorado), Rohan Das (Colorado), Chih-Hao Fang (Purdue), Ananth Grama (Purdue), I-Ta Lee (META), Maria Leonor Pacheco (Colorado)

LLMs for Few-shot Information Extraction with Climate Action Plans. Nupoor Gandhi (Carnegie Mellon), Tom Corringham (UC San Diego), Emma Strubell (Carnegie Mellon University)

TopicGPT: A Prompt-Based Framework for Topic Modeling. Chau Minh Pham (UMass Amherst), Alexander Hoyle (Maryland), Simeng Sun (UMass Amherst), Mohit Iyyer (UMass Amherst)

Beyond Denouncing Hate: Strategies for Countering Implied Biases and Stereotypes in Language. Jimin Mun (Carnegie Mellon), Emily Allaway (Columbia), Akhila Yerukola (Carnegie Mellon), Laura Vianna (Washington), Sarah-Jane Leslie (Princeton), Maarten Sap (Carnegie Mellon)

RIVETER: Measuring Power and Social Dynamics Between Entities. Maria Antoniak (AI2), Anjalie Field (Johns Hopkins), Jimin Mun (Carnegie Mellon), Melanie Walsh (Washington), Lauren F. Klein (Emory), Maarten Sap (Carnegie Mellon)

Lost in Translation: Using Language Models to Investigate Cultural Adaptation of Chinese Immigrants from Parallel Chinese Restaurant Names in the United States. Hang Jiang (MIT), Nanxi Liu (Wellesley), Jad Kabbara (MIT), Deb Roy (MIT)

The Language of US Partisan Newspapers from 1869 to 1925. Si Wu (Northeastern), David Smith (Northeastern)

The Operational Code of World Leaders: A New Comparison Sample Using the United Nations General Debate Corpus 1970-2021. Sercan Canbolat (UConn), Baris Kesgin (Elon), Leah Windsor (Memphis)

"One-size-fits-all"? Observations and Expectations of NLG Systems across Identity-related Language Features. Li Lucy (UC Berkeley), Su Lin Blodgett (Microsoft), Milad Shokouhi (Microsoft), Hanna Wallach (Microsoft), Alexandra Olteanu (Microsoft)

Decoding Disparities: A Textual Analysis of Clinical Notes Across Identity Attributes. Afia Khan (Chicago)

XiaoshuoNLP: An Computational Pipeline for Processing Chinese Literary Texts. Kiara Meng Hui Liu (Cornell), Xiaomeng Zhu (Yale), Carolyn Jane Anderson (Wellesley)

Exploring Ideal Point Estimation through Twitter Social Networks and Text Data. Yicheng Shen, Alexander Volfovsky (Duke)

Poster Session II. Friday, 8:45am.

GPT Detects Dissent Between Hawks and Doves in the Federal Open Market Committee. Denis Peskoff (Princeton), Adam Visokay (Washington), Sander Schulhoff (Maryland), Benjamin Wachspress (Princeton), Alan Blinder (Princeton), Brandon Stewart (Princeton)

Comparing morphosyntactic indicators of power in Classical Latin texts and their English translations. Marisa Hudspeth, Brendan O'Connor, Laure Thompson (UMass Amherst)

The Generalized Topic Model. Elliott Ash, Germain Gauthier, Philine Widmer (PostDoc, ETH Zurich)

T5 meets Tybalt: author attribution in Early Modern English drama using large language models. Rebecca Hicke, David Mimno (Cornell)

Using Cross-Encoder to Construct Sequences of Socio-Political Events. Han Zhang, Zhiyu Li (The Hong Kong University of Science and Technology)

Diachronic Syntactic and Semantic Shifts in Latin: Corpus, Method, and Relationships to Auerbach's Literary Scholarship. Hale Sirin, Tom Lippincott (Johns Hopkins)

A Computational Model of Selection and Framing in News about the US Economy. Alexandria Leto (Colorado), Elliot Pickens (Wisconsin), Coen Needell (Penn), David Rothschild (Microsoft), Maria Leonor Pacheco (Colorado)

On the Limits of Linguistic Answers to Social Problems. Justine Zhang (Michigan)

Excavating the Evolving Self in Autobiographies. Avra Janz (New York University)

Supply and demand: How social norms are constructed in Chinese-language job advertisements. Anna Zhang (Northeastern)

Using Large Language Models to detect the transmission of Darwinian Ideas. Lucian Li (Illinois)

Leveraging LLMs for cleaning text data with privacy constraints. Andrea W. Wang (Cornell), Allison Koenecke (Cornell), David Mimno (Cornell)

Russian War Propaganda – Evidence from Rossiyskaya Gazeta. Yufan Yang (Augusta)

A Computational Linguistic Measure of Anthropomorphism. Myra Cheng, Kristina Gligoric, Tiziano Piccardi, Dan Jurafsky (Stanford)

Tracing Accounts of Racial Terror in Historical Newspapers. Shijia Liu, David A. Smith (Northeastern)

An embarrassingly simple method for attributed network embedding. Jacob A. Matthews, Imane Terhmina, Laurent Dubreuil, Marten van Schijndel (Cornell)

International News Synchrony During the Start of the COVID-19 Pandemic. Xi Chen (UMass Amherst), Scott Hale (Oxford), David Jurgen (Michigan), Mattia Samory (Sapienza University of Rome), Ethan Zuckerman (UMass Amherst), Przemyslaw Grabowicz (UMass Amherst)

Inside the Echo Chamber: Leveraging Language Models to Measure Community Consensus. Jeremiah Milbauer, Emma Strubell (Carnegie Mellon)

What Do Readers Value? Manually Tagging and Quantitatively Measuring Aspects in Goodreads Reviews. Maria Antoniak (AI2), Yujia Gao (Coinbase), Melanie Walsh (Washington), David Mimno (Cornell)

Framing Social Movements on Social Media: Unpacking Diagnostic, Prognostic, and Motivational Strategies. Julia Mendelsohn, Maya Vijan, Dallas Card, Ceren Budak (Michigan)

Understanding social identity bias in large language models. Tiancheng Hu, Yaroslava Kyrychenko, Sander van der Linden, Nigel Collier, Jon Roozenbeek (Cambridge)

The Online #StopAsianHate Movement: More Global and BTS-Driven Than You'd Think. Tessa Masis, Zhangqi Duan, Weiai Xu, Jonathan Corpus Ong, Ethan Zuckerman, Jane Pyo, Brendan O'Connor (UMass Amherst)

Exploring GPT-4's Capabilities in Discourse Analysis for Aphasia: Advancing Language Treatment Outcomes through AI. Vishnupriya Varadharaju, Jacquie Kurland, Anna Liu, Brendan O'Connor (UMass Amherst)

Large Language Models Can Be Used to Estimate the Latent Positions of Politicians. Patrick Y. Wu, Jonathan Nagler, Joshua A. Tucker, Solomon Messing (New York University)

Eliciting Ideological Scales from Large Language Models. Sean O'Hagan, Aaron Schein (Chicago)

Natural Language Decompositions of Implicit Content Enable Better Text Representations. Alexander Hoyle (Maryland), Rupak Sarkar (Maryland), Pranav Goel (Northeastern), Philip Resnik (Maryland)

Large Language Models in the Limelight: Testing their Effectiveness through Disinformation Detection. Matyas Bohacek (Stanford), Michal Bravansky (University College London)

Selection, appraisal, and provenance of pretraining datasets for pretrained language models. Meera Desai, Dallas Card, Abigail Jacobs (Michigan)

Measuring Diversity in Online News. Samar Haider (Penn), David Rothschild (Microsoft), Chris Callison-Burch (Penn), Duncan Watts (Penn)

Modeling Legal Reasoning: Annotation at the Edge of Human Agreement. Rosamond Thalken, Edward H. Stiglitz, David Mimno, Matthew Wilkens (Cornell)