

# Michael Miller Yoder

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EDUCATION	<b>Carnegie Mellon University</b> , Pittsburgh, PA <i>Ph.D.</i> , Language and Information Technologies 2021 Advisor: Carolyn P. Rosé Thesis: “Computational models of identity presentation in language” PDF <i>M.S.</i> , Language Technologies 2017  <b>Goshen College</b> , Goshen, IN <i>B.A.</i> , Computer Science 2013 Minors: English, International Studies
RESEARCH INTERESTS	Natural language processing, computational social science, hate speech, language and identity, sociolinguistics, discourse analysis, digital humanities
CONFERENCE & WORKSHOP PUBLICATIONS	<b>How Hate Speech Varies by Target Identity: A Computational Analysis</b> Michael Miller Yoder, Lynnette Hui Xian Ng, David West Brown, Kathleen M. Carley <i>Proceedings of the Conference on Computational Natural Language Learning (CoNLL)</i> , 2022.  <b>FanfictionNLP: A Text Processing Pipeline for Fanfiction</b> Michael Miller Yoder, Sopan Khosla, Qinlan Shen, Aakanksha Naik, Huiming Jin, Hariharan Muralidharan, Carolyn P. Rosé <i>Proceedings of the Workshop on Narrative Understanding</i> , 2021. PDF.  <b>Modeling Unstructured Data: Teachers as Learners and Designers of Technology- enhanced Artificial Intelligence Curriculum</b> Cansu Tatar, Michael Miller Yoder, Madeleine Coven, Kenia Wiedemann, Jie Chao, William Finzer, Shiyan Jiang, Carolyn P. Rosé <i>Proceedings of the International Society of the Learning Sciences</i> , 2021. PDF.  <b>Phans, Stans and Cishets: Self-presentation Effects on Content Propagation in Tumblr</b> Michael Miller Yoder, Qinlan Shen, Yansen Wang, Alex Coda, Yunseok Jang, Yale Song, Kapil Thadani, Carolyn P. Rosé <i>Proceedings of the ACM Conference on Web Science (WebSci)</i> , 2020. PDF.  <b>Perceptions of Censorship and Moderation Bias in Political Debate Forums</b> Qinlan Shen, Michael Miller Yoder, Yohan Jo, Carolyn P. Rosé <i>Proceedings of the International AAAI Conference on Web and Social Media (ICWSM)</i> , 2018. PDF.  <b>Roles and Success in Wikipedia Talk Pages: Identifying Latent Patterns of Behavior</b> Keith Maki, Michael Miller Yoder, Yohan Jo, Carolyn P. Rosé <i>Proceedings of the International Joint Conference on Natural Language Processing (IJCNLP)</i> , 2017. PDF. <b>Best Student Paper Award.</b>  <b>Modeling Dialogue Acts with Content Word Filtering and Speaker Preferences</b> Yohan Jo, Michael Miller Yoder, Hyeju Jang, Carolyn P. Rosé <i>Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)</i> , 2017. PDF.

**Code-Switching as a Social Act: The Case of Arabic Wikipedia Talk Pages**  
Michael Miller Yoder, Shruti Rijhwani, Carolyn P. Rosé, Lori Levin  
*Proceedings of the Workshop on Natural Language Processing and Computational Social Science (NLP+CSS)*, 2017. PDF.

**Metaphor Detection with Topic Transition, Emotion and Cognition in Context**

Hyeju Jang, Yohan Jo, Qinlan Shen, Michael Miller, Shane Moon, Carolyn P. Rosé  
*Proceedings of the Association for Computational Linguistics (ACL)*, 2016. PDF.

JOURNAL  
ARTICLES

**An empirical analysis of high school students’ practices of modelling with unstructured data**

Shiyan Jiang, Amato Nocera, Cansu Tatar, Michael Miller Yoder, Jie Chao, Kenia Wiedemann, William Finzer, Carolyn P. Rosé  
*British Journal of Educational Technology*, 1–20, 2022. HTML.

**Unpacking a political icon: “Bike lanes” and orders of indexicality**

Michael Miller Yoder, Barbara Johnstone  
*Discourse & Communication*, 12(2), 192–208, 2018.

WHITEPAPERS &  
DEMONSTRATIONS

**Research Needs for Countering Extremist Hate**

Michael Miller Yoder, Hana Habib  
Whitepaper, Collaboratory Against Hate, 2022. PDF.

**StoryQ: A Web-Based Machine Learning and Text Mining Tool for K-12 Students**

Jie Chao, Bill Finzer, Carolyn P. Rosé, Shiyan Jiang, Michael Miller Yoder, James Fiacco, Chas Murray, Cansu Tatar, Kenia Wiedemann  
*SIGCSE 2022: Proceedings of the 53rd ACM Technical Symposium on Computer Science Education V. 2*, 1178, 2022.

INVITED TALKS &  
PANELS

**Computational models for social good: Beyond bias and representation (panel)**

Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation (SBP-BRIMS), Pittsburgh, PA, 2022.

**Creating a resource directory for crisis (panel)**

Eradicate Hate Global Summit, Pittsburgh, PA, 2022.

**Detecting hate speech with natural language processing**

IdeaS Summer Institute, Carnegie Mellon University, Pittsburgh, PA, 2022.

**Computational models of identity presentation in language**

Department of Linguistics, University of Pittsburgh, Pittsburgh, PA, 2020.

CONFERENCE  
PRESENTATIONS

**The Spatiotemporal Reach of Hate Narratives**

Ahmad Diab, Michael Miller Yoder, Yu-Ru Lin  
Eradicate Hate Global Summit 2022 Poster Session, Pittsburgh, PA, 2022.

**The Relationship Between Antisemitism and COVID-19 Conspiracy on Twitter**

Grace Garner, Madeleine McGrann, Maja Lynn, Rachel Kranson, Daniel Klug, Michael Miller Yoder  
Eradicate Hate Global Summit 2022 Poster Session, Pittsburgh, PA, 2022.

**“Everyone is gay and nothing hurts”:  
the presentation of queer relationships in fanfiction**

Michael Miller Yoder, Luke Breitfeller, Carolyn P. Rosé

Association for Computers and the Humanities, Pittsburgh, PA, 2019.

**Ron the Death Eater: plotting characterization from canon to fanfiction**

Michael Miller Yoder, Qinlan Shen, James Fiocco, Carolyn P. Rosé

Society for Text & Discourse, New York, NY, 2019.

**Identity and interaction on Tumblr**

Michael Miller Yoder, Qinlan Shen, Yansen Wang, Alex Coda, Yunseok Jang, Yale Song, Kapil Thadani, Carolyn P. Rosé

Student Research Symposium

Language Technologies Institute, Carnegie Mellon University, 2019.

**Best Poster Award.**

**Linguistic liminality: Tamazight, Arabic and French in Guigou, Morocco**

Michael Miller

Student Research Symposium, Goshen College, 2013.

**Audience Choice Award.**

TEACHING

**Computational Ethics for Natural Language Processing**

**Spring 2020**

*Teaching Assistant*

Carnegie Mellon University

**Applied Machine Learning**

**Spring 2019**

*Teaching Assistant*

Carnegie Mellon University

**Introduction to Artificial Intelligence**

**Spring 2013**

*Tutor*

Goshen College

PROFESSIONAL  
EXPERIENCE

**Postdoctoral Fellow**

Carnegie Mellon University

2022–present

Pittsburgh, PA

Researcher with the Collaboratory Against Hate, an interdisciplinary initiative of Carnegie Mellon University and the University of Pittsburgh. Developing new methods for tracking and detecting hate speech in online contexts. Advised by Prof. Kathleen M. Carley in the Institute for Software Research and Prof. David West Brown in the Department of English.

**Graduate Research Assistant**

Carnegie Mellon University

2015–2021

Pittsburgh, PA

Apply computational models of discourse to study social meaning in language, largely using social media datasets. Advised by Prof. Carolyn P. Rosé in the Language Technologies Institute.

**Software Engineering Intern**

Yahoo Research/Tumblr

2019

New York, NY

Detected communities of Tumblr users from social network structure. Explored community-specific language use. Advised by Dr. Kapil Thadani.

**Research Programmer/Analyst**

Carnegie Mellon University

2015

Pittsburgh, PA

Designed and implemented neuroimaging database to support machine learning research. Advised by Prof. Timothy Verstynen in the Department of Psychology.

	<b>Software Developer &amp; IT Administrator</b> 2014 Austin, TX area Developed applications to recognize and map named entities in English and Arabic articles and social media. Managed software development and IT administration of a small GIS startup named Geospatial Applied Research Experts House.
HONORS & AWARDS	<b>NSF Graduate Research Fellowship</b> 2015–2018 Awarded national fellowship with a focus area in natural language processing.  <b>President’s Leadership Award Scholarship, Goshen College</b> 2009–2013 Awarded top merit scholarship for leadership in academic studies.
ACADEMIC SERVICE	<i>Organizing:</i> <ul style="list-style-type: none"> <li>• Eradicate Hate Global Summit 2022 Poster Session</li> </ul> <i>Reviewing (NLP):</i> <ul style="list-style-type: none"> <li>• EMNLP 2022 Computational Social Science track</li> <li>• ACL Rolling Review (2022- )</li> <li>• ACL-IJCNLP 2021 (<b>Outstanding Reviewer</b>)</li> <li>• CoNLL 2020</li> <li>• Bridging Human-Computer Interaction and NLP Workshop (HCI+NLP) 2021</li> <li>• NAACL Student Research Workshop 2021, 2022</li> <li>• ACL Student Research Workshop 2020</li> <li>• AACL-IJCNLP Student Research Workshop 2020</li> <li>• Human and Machine-in-the-Loop Evaluation and Learning Strategies Workshop (HAMLETS @ NeurIPS) 2020</li> </ul> <i>Reviewing (Digital Humanities):</i> <ul style="list-style-type: none"> <li>• <i>Between Invention and Audience: DocuScope and the Rhetorical Approach to Corpus Analysis</i> (Studies in Corpus Linguistics, John Benjamins Press), 2022</li> <li>• <i>Humanities</i> journal, special issue on fanfiction, 2022</li> <li>• Association for Computers and the Humanities (ACH) 2021</li> <li>• Digital Humanities (DH) 2020</li> </ul>
INTERNATIONAL EXPERIENCE	<b>Bicycle Tourist</b> 2013–2014 Paraguay, South America to Indiana, USA Bicycled with a group of three over 10,000 miles from South America to the United States on an 11-month self-supported journey. Learned conversational Spanish and gained familiarity with Latin American culture.  <b>Researcher and Service Worker</b> 2012 Meknes and Guigou, Morocco Studied Moroccan language and culture for 12 weeks while living with host families in urban and rural settings. Researched code-switching among Tamazight, French, Colloquial and Modern Standard Arabic speakers in the Middle Atlas Mountains.  <b>Youth Camp Volunteer</b> 2011 West Bank, Palestine & Israel Studied and practiced Levantine and Modern Standard Arabic for 9 weeks. Participated in history and learning tours of the Israeli-Palestinian conflict while living with a Palestinian friend’s family. Facilitated crafts and games for Palestinian youth.