

# REBECCA M. M. HICKE

PHD CANDIDATE, COMPUTER SCIENCE, CORNELL UNIVERSITY

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## EDUCATION

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**Cornell University**, Ph.D. Candidate, Computer Science Fall 2022 – present  
Minor: Information Science *Ithaca, NY*  
GPA: 4.00  
Committee: David Mimno (chair), Lillian Lee, Jon Kleinberg, Ross Kristensen-McLachlan

**Carleton College**, B.A. *cum laude*, Computer Science and English June 2022  
Minor: Digital Arts and Humanities *Northfield, MN*  
GPA: 3.86  
Advisors: Eric Alexander and George Shuffelton  
*Received distinction in both majors*

## RESEARCH AND INDUSTRY EXPERIENCE

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**Graduate Research Assistant**, Cornell University August 2022 – present  
Advisor: David Mimno *Ithaca, NY*  
*Areas:* Digital humanities, natural language processing, machine learning

**Research Intern**, AIIL Group, Microsoft Research May 2025 – August 2025  
Advisor: Kiran Tomlinson *Redmond, Washington*  
*Areas:* Natural language processing, machine learning, user modeling

**Graduate Research Assistant**, Aarhus University May 2024 – August 2024  
Advisor: Ross Deans Kristensen-McLachlan *Aarhus, Denmark*  
*Areas:* Digital humanities, natural language processing, machine learning

**PiTech Research Fellow**, Cornell University June 2023 – August 2023  
Host Organization: Good Call NYC *Remote*  
*Areas:* Data visualization, data processing and analysis

**Research Scientist**, Authors AI May 2023 – August 2023  
*Areas:* Natural language processing *Remote*

**Undergraduate Research Assistant**, Carleton College June 2020 – May 2022  
Advisor: Eric Alexander *Northfield, MN*  
*Areas:* Digital humanities, data visualization, human-computer interaction

**Undergraduate Research Assistant**, UC Berkeley June 2021 – March 2022  
REU – Summer Undergraduate Program in Engineering Research at Berkeley *Remote*  
Advisors: Sarah Chasins and Aditya Parameswaran

## PUBLICATIONS

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- Hamilton, Sil, **Rebecca M. M. Hicke**, David Mimno, and Matthew Wilkens. 2025. “Too Long, Didn’t Model: Decomposing LLM Long-Context Understanding with Novels.” *Preprint*.
- Hicke, Rebecca M. M.**, Sil Hamilton, and David Mimno. 2025. “The Zero Body Problem: Probing LLM Use of Sensory Language.” *Proceedings of the 2<sup>nd</sup> Conference on Language Modeling*.
- Hamilton, Sil, **Rebecca M. M. Hicke**, and David Mimno. 2025. “A City of Millions: Mapping Literary Social Networks at Scale.” *Proceedings of the 5<sup>th</sup> International Conference on Natural Language Processing for Digital Humanities*.
- Hicke, Rebecca M. M.** and David Mimno. 2025. “Looking for the Inner Music: Probing LLMs’ Understanding of Literary Style.” *Expanding the Toolkit: Large Language Models in Humanities Research – Computational Humanities Research*.
- Hicke, Rebecca M. M.**, Yuri Bizzoni, Pascale Feldkamp, and Ross Deans Kristensen-McLachlan. 2025. “Says Who? Effective Zero-Shot Annotation of Focalization.” *Preprint*.
- Hicke, Rebecca M. M.** and Ross Deans Kristensen-McLachlan. 2024. “SCIENCE IS EXPLORATION: Computational Frontiers for Conceptual Metaphor Theory.” *Proceedings of the 5<sup>th</sup> Computational Humanities Research Conference*.  
**Finalist – Best Short Paper Award**
- Kristensen-McLachlan, Ross Deans, **Rebecca M. M. Hicke**, Márton Kardos, and Mette Thunø. 2024. “Context is Key(NMF): Modelling Topical Information Dynamics in Chinese Diaspora Media.” *Proceedings of the 5<sup>th</sup> Computational Humanities Research Conference*.
- Hicke, Rebecca M. M.** and David Mimno. 2024. “[Lions: 1] and [Tigers: 2] and [Bears: 3], Oh My! Literary Coreference Annotation with LLMs.” *Proceedings of the 8<sup>th</sup> Joint SIGHUM Workshop on Computational Linguistics for Cultural Heritage, Social Sciences, Humanities and Literature*.
- Hicke, Rebecca M. M.** and David Mimno. 2023. “T5 meets Tybalt: author attribution in Early Modern English drama using large language models.” *Proceedings of the 4<sup>th</sup> Computational Humanities Research Conference*.
- Hicke, Rebecca M. M.** and David Mimno. 2024. “‘Let every word weight heavy of her worth’: Examining How Women Enact Power in Shakespeare’s Comedies through Interactive Speech Pattern Visualizations.” In *Computational Drama Analysis: Reflecting Methods and Interpretations*. De Gruyter.
- Hicke, Rebecca M. M.**, Maanya Goenka, and Eric Alexander. 2022. “Word Clouds in the Wild.” *2022 IEEE 7<sup>th</sup> workshop on Visualization for the Digital Humanities (Vis4DH)*.

## TEACHING

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CS/INFO 3300: Data-Driven Web Applications (1 term)  
 CS 2110: Object-Oriented Programming and Data Structures (1 term)  
 CS/INFO 4300: Language and Information (1 term)  
*Received award for TAing contributions*

<b>Program Assistant</b> , Carleton College History of Computing Off-Campus Studies Program	June 2022 – August 2022
<b>Undergraduate Teaching Assistant</b> , Carleton College CS 111: Introduction to Computer Science (1 term) CS 201: Data Structures (4 terms) CS 202: Math of Computer Science (2 terms)	March 2020 – June 2022
<b>West Coast Swing Teacher</b> , Carleton College	January 2020 – March 2020
<b>Competitive Ballroom and Latin Dance Team</b> , Carleton College Treasurer, June 2019 – June 2020 Captain, June 2020 – June 2022	June 2019 – June 2022
<b>Residential and Program Assistant</b> , UT Austin First Bytes Computer Science Camp (2 sessions) Code Longhorn Computer Science Camp (1 session) Robotics Camp (2 sessions) Cybersecurity Camp (1 session)	June 2018 – July 2020

## SERVICE

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<b>Graduate Mentor</b> , Cornell University	2024 – present
<b>ACSU Research Night Graduate Co-Organizer</b> , Cornell University	2023 – present
<b>Student-Applicant Support Program Mentor</b> , Cornell University	Fall 2022, 2023, 2024
<b>Session Chair</b> Fourth Conference on Computational Humanities Research (CHR)	December 2023
<b>Reviewer</b> DH 2024 LaTeX-CLfL 2024	January 2024 January 2024
<b>Associate Reviewer</b> Open Research Europe CHR 2023 Journal of Computational Literary Studies	September 2023 September 2023 April 2023
<b>New Visions in Engineering</b> , Cornell University Mentor Coordinator	September 2022 – June 2023 September 2023 – June 2024

<b>Bowers Undergraduate Research Experience (BURE) Mentor</b> , Cornell University	Summer 2023
<b>Accepted Graduate Student Visiting Days Volunteer</b> , Cornell University	May 2023

## AWARDS & FELLOWSHIPS

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<b>Hopcroft Fellowship</b> , Cornell University	2022 – 2023
<b>Laurence McKinley Gould Prize in Natural Science</b> , Carleton College	May 2022
<b>David John Field Prize</b> , Carleton College	May 2022
<b>The David Pollatsek '96 Prize in Computer Science</b> , Carleton College	May 2022
<i>Distinction</i> – <b>Computer Science Senior Thesis</b> , Carleton College	May 2022
<i>Distinction</i> – <b>English Senior Thesis</b> , Carleton College	April 2022
<b>Thorsen Scholarship</b> , Carleton College	2020 – 2022
<b>Larson International Fellowship</b> , Carleton College	2021

## PRESENTATIONS

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<b>SCIENCE IS EXPLORATION: Computational Frontiers for Conceptual Metaphor Theory</b> , CHR 2024	December 2024
<b>[Lions: 1] and [Tigers: 2] and [Bears: 3], Oh My! Literary Coreference Annotation with LLMs</b> , LaTeCH-CLfL 2024 Poster Presentation	March 2024
<b>T5 meets Tybalt: author attribution in Early Modern English drama using large language models</b> , CHR 2023	December 2023
<b>T5 meets Tybalt: author attribution in Early Modern English drama using large language models</b> , TADA 2023 Poster Presentation	November 2023
<b>Large Language Models and NER: <i>Better Results with Less Work</i></b> , DH 2023 Poster Presentation	July 2023
<b>Word Clouds in the Wild</b> , Vis4DH – IEEE Vis	October 2022
<b>Examining How Women Enact Power in Shakespeare's Comedies through Interactive Speech Pattern Visualizations</b> , Workshop on Computational Drama Analysis	September 2022
<b>Practicum 2.0: An Interactive Tool for Introductory CS Topics</b> , Carleton College Computer Science Undergraduate Senior Thesis Talk	May 2022
<b>"Let every word weight heavy of her worth"</b> , Carleton College English Undergraduate Senior Thesis Talk	May 2022

<b>Technical Talk – “Let every word weigh heavy of her worth”,</b> Carleton College English Undergraduate Senior Thesis Technical Talk	March 2022
<b>Tools for Tracking Police Misconduct Data,</b> Carleton College Summer Research Presentation	October 2021
<b>Technical Talk – Tools for Tracking Police Misconduct Data,</b> UC Berkeley SUPERB REU Technical Talk	August 2021
<b>Virtual Poster Session – Word Clouds in the Wild,</b> Carleton College	October 2020
<b>Word Clouds in the Wild,</b> Carleton College Summer Research Presentation	August 2020