# REBECCA M. M. HICKE

PHD CANDIDATE, COMPUTER SCIENCE, CORNELL UNIVERSITY

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#### **EDUCATION**

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

**Graduate Research Assistant**, Cornell University

August 2022 – present

Advisor: David Mimno

Ithaca, NY

Areas: Digital humanities, natural language processing, machine learning

**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

Areas: Human-computer interaction

## **PUBLICATIONS**

- **Hicke, Rebecca M. M.** and David Mimno. 2025. "Looking for the Inner Music: Probing LLMs' Understanding of Literary Style." *Preprint*.
- **Hicke, Rebecca M. M.**, Yuri Bizzoni, Pascale Feldkamp, and Ross Deans Kristensen-McLachlan. 2024. "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**

## **Graduate Teaching Assistant**, Cornell University

August 2023 – present

INFO 3300: Data-Driven Web Applications (1 term)

CS 2110: Object-Oriented Programming and Data Structures (1 term)

#### Program Assistant, Carleton College

June 2022 – August 2022

History of Computing Off-Campus Studies Program

## **Undergraduate Teaching Assistant**, Carleton College

March 2020 – June 2022

CS 111: Introduction to Computer Science (1 term)

CS 201: Data Structures (4 terms)

CS 202: Math of Computer Science (2 terms)

### West Coast Swing Teacher, Carleton College

January 2020 – March 2020

| Competitive Ballroom and Latin Dance Team, Carleton College<br>Treasurer, June 2019 – June 2020<br>Captain, June 2020 – June 2022   | June 2019 – June 2022      |
|---|----------------------------|
| Residential and Program Assistant, 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   |                            |
| Graduate Mentor, Cornell University   | 2024 – present             |
| ACSU Research Night Graduate Co-Organizer, Cornell University   | 2023 – present             |
| Student-Applicant Support Program Mentor, Cornell University  | Fall 2022, 2023, 2024      |
| Session Chair Fourth Conference on Computational Humanities Research (CHR)  | December 2023              |
| Reviewer  |                            |
| DH 2024   | January 2024               |
| LaTeCH-CLfL 2024 Associate Reviewer   | January 2024               |
| Open Research Europe  | September 2023             |
| CHR 2023  | September 2023             |
| Journal of Computational Literary Studies   | April 2023                 |
| New Visions in Engineering, Cornell University  |                            |
| Mentor  | September 2022 – June 2023 |
| Coordinator   | September 2023 – June 2024 |
| Bowers Undergraduate Research Experience (BURE) Mentor, Cornell   | University Summer 2023     |
| Accepted Graduate Student Visiting Days Volunteer, Cornell Universit  | May 2023                   |
| AWARDS & FELLOWSHIPS  |                            |
| Hopcroft Fellowship, Cornell University   | 2022 - 2023                |
| Laurence McKinley Gould Prize in Natural Science, Carleton College  | May 2022                   |
| David John Field Prize, Carleton College  | May 2022                   |
| The David Pollatsek '96 Prize in Computer Science, Carleton College   | May 2022                   |
| Distinction – Computer Science Senior Thesis, Carleton College  | May 2022                   |
| Distinction – English Senior Thesis, Carleton College   | April 2022                 |

| Thorsen Scholarship, Carleton College   | 2020 - 2022    |  |
|---|----------------|--|
| Larson International Fellowship, Carleton College   | 2021           |  |
| Presentations   |                |  |
| SCIENCE IS EXPLORATION: Computational Frontiers for Conceptual Metaphor Theory, CHR 2024  | December 2024  |  |
| [Lions: 1] and [Tigers: 2] and [Bears: 3], Oh My! Literary Coreference Annotation with LLMs,  LaTeCH-CLfL 2024 March 2024  Poster Presentation        |                |  |
| T5 meets Tybalt: author attribution in Early Modern English drama using large language models, CHR 2023   | December 2023  |  |
| T5 meets Tybalt: author attribution in Early Modern English drama using large language models, TADA 2023 Poster Presentation                          | November 2023  |  |
| Large Language Models and NER: Better Results with Less Work, DH 2023 Poster Presentation   | July 2023      |  |
| Word Clouds in the Wild, Vis4DH – IEEE Vis  | October 2022   |  |
| Examining How Women Enact Power in Shakespeare's Comedies through Interactive Speech Pattern Visualizations, Workshop on Computational Drama Analysis | September 2022 |  |
| Practicum 2.0: An Interactive Tool for Introductory CS Topics, Carleton College<br>Computer Science Undergraduate Senior Thesis Talk                  | May 2022       |  |
| "Let every word weight heavy of her worth", Carleton College<br>English Undergraduate Senior Thesis Talk  | May 2022       |  |
| Technical Talk – "Let every word weigh heavy of her worth", Carleton College English Undergraduate Senior Thesis Technical Talk                       | March 2022     |  |
| Tools for Tracking Police Misconduct Data, Carleton College<br>Summer Research Presentation   | October 2021   |  |
| Technical Talk – Tools for Tracking Police Misconduct Data, UC Berkeley SUPERB REU Technical Talk   | August 2021    |  |
| Virtual Poster Session – Word Clouds in the Wild, Carleton College  | October 2020   |  |
| Word Clouds in the Wild, Carleton College<br>Summer Research Presentation   | August 2020    |  |