# Federica Bologna

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## Research Interests

Natural Language Processing (NLP), Healthcare, Computational Social Science

## Education

2021-Present **Ph.D. in Information Science**, Cornell University
Advisor: Matthew Wilkens
Minor: Sociology

2017-2020 **M.A. in Modern, Post-colonial and Comparative Literature**, University of Bologna, Italy
Advisors: Elena Lamberti and Matthew Wilkens
Thesis: *A Computational Approach to Urban Space in Science Fiction*

2014-2017 **B.A. in Foreign Languages and Literature**, University of Bologna, Italy

## Publications

Working paper Causal Effect of Character Gender on Readers' Preferences
**Federica Bologna**, Ian Lundberg, Matthew Wilkens

Working paper Evaluation of GPT-4 for Patient Question Answering About Endometriosis
**Federica Bologna**, Ian Lundberg, Matthew Wilkens

Under review Endometriosis Online Communities: A Quantitative Analysis
**Federica Bologna**, Rosamond Thalken, Kristen Pepin, Matthew Wilkens

Under review Stylometric Identification of the "Unknown Male Author" in Veronica Franco's *Terze rime*
Giulia Andreoni, **Federica Bologna**, Marilyn Migiel

2024 Endometriosis Online Communities: How Machine Learning Can Help Physicians Understand What Patients Are Discussing Online
Kristen Pepin, **Federica Bologna**, Rosamond Thalken, Matthew Wilkens

*Journal of Minimally Invasive Gynecology*

2022    Do open citations give insights on the qualitative peer-review evaluation in research assessments? An analysis of the Italian National Scientific Qualification
**Federica Bologna**, Angelo Di Iorio, Silvio Peroni, Francesco Poggi
*Scientometrics*

2022    Open bibliographic data and the Italian National Scientific Qualification: measuring coverage of academic fields
**Federica Bologna**, Angelo Di Iorio, Silvio Peroni, Francesco Poggi
*Quantitative Science Studies*

2020    A Computational Approach to Urban Space in Science Fiction
**Federica Bologna**
*Journal of Cultural Analytics*

## Professional experience

Summer 2023    **PiTech PhD Impact Fellow**, NYC Health + Hospitals
Managers: Michael Bouton,MD,MBA, David Silvestri,MD,MBA,MHS, Anand Reddy, MD
• Evaluated strategies to reduce nurses' alert fatigue by comparing pre- and post- intervention alert rates using non- parametric statistical testing.
• Demonstrated that revising alert criteria can reduce unnecessary alerts by up to 94%, while improving alert design can reduce overridden alerts by up to 64%.
• Devised and recommended alert revisions to hospital informatics leadership based on interviews with nursing staff.

2020-2021    **Research Assistant**, University of Bologna, Italy
Mentors: Angelo Di Iorio, Silvio Peroni, and Francesco Poggi
• Evaluated the suitability of open access datasets for academic evaluation processes.
• Examined committees' decisions with citation network analysis and supervised classification.

## Posters & Presentations

2023    **What is Happening in Endometriosis Online Communities?**
Kristen Pepin, Federica Bologna, and Matthew Wilkens
Main Stage Presentation at the 2023 Global Congress of the American Association of Gynecologic Laparoscopists (AAGL)

2022    **Support and Relationship Patterns in Endometriosis Narratives**
Federica Bologna, Rosamond Thalken, David Mimno, and Matthew Wilkens
Long Presentation at DH2022

2021    **Analyzing Urban Space's Presence in Science Fiction Using Token Counts**
Federica Bologna
Presentation at *University of Naples "L'Orientale" Graduate Conference 2020*

## Teaching Experience

Fall 2024    Graduate TA, **INFO 3350: Text mining for history and literature**, Cornell University
Spring 2024    Graduate TA, **INFO 3370: Studying Social Inequality with Data Science**, Cornell University
Spring 2023    Graduate TA, **INFO 3370: Studying Social Inequality with Data Science**, Cornell University
Spring 2022    Graduate TA, **INFO 3350: Text mining for history and literature**, Cornell University

## Honors, Awards *&* Scholarships

2024    **Microsoft Azure Cloud Computing Grant**, Cornell University
2023    **Outstanding Teaching Award**, Cornell University
2023    **Siegel Family Endowment PiTech PhD Impact Fellow**, Cornell University
2019    **M.A. Thesis Research Abroad Scholarship**, University of Bologna, Italy
2017    **Overseas Study Abroad Scholarship**, University of Bologna, Italy

## Professional services

2022    Reviewed for *Computational Humanities Research 2022*.
2021    Reviewed for *Computational Humanities Research 2021*.

## Non-degree studies

2017-2018    **Overseas Study Abroad Program**, University of California, Los Angeles