## Federica Bologna

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#### **Education**

Cornell University Ithaca, N.Y.

Ph.D. in Information Science | Minor: Sociology Expected May 2027

University of Bologna Bologna, Italy

M.A. in Modern, Post-Colonial and Comparative Literature

University of Bologna Bologna, Italy

B.A. in Foreign Languages and Literature

## Research Expertise

Computational Social Science, Natural Language Processing (NLP), Medical Narratives, Online Communities, Causal Inference, Cultural Analytics, Science of Science

#### Skills

**Programming** Python (Scikit-learn, BERT, Spacy, NLTK, Pandas, NumPy, Matplotlib, Plotly, Seaborn etc.),

R (tidyverse), Bash

**Tools** Git(Hub), <code>MTFX(Overleaf)</code>, Qualtrics, Hugging Face, Microsoft Office

**Methods** NLP (supervised classification, topic modeling, etc.), Quantitative (causal inference, data analysis,

statistical testing), Qualitative (surveys)

## Selected Research Experience

#### **Evaluation of GPT for Patient Question Answering**

Ithaca, NY

Cornell University

Sep 2023 - Present

Work in progress... @-@

# Stylometric Identification of the "Unknown Male Author" in Veronica Franco's *Terze rime*

Ithaca, NY

**Cornell University** 

Jun 2022 - May 2023

• Conducted authorship attribution in low-resource languages, specifically 16th-century Italian, combining character trigrams, supervised classification, and high-dimensional data visualization techniques.

#### **User Needs and Peer Support in Endometriosis Online Communities**

Ithaca, NY

Cornell University

Sept 2021 - Dec 2022

- Investigated aggregate patients' needs, impact of relationships on patients' experiences and peer support practices in two endometriosis online communities.
- Identified large-scale trends in posts' topics, the relationships mentioned, and the support the posts seek using supervised classification with DistilBERT and LDA topic modeling.
- Submitted publication and presented preliminary findings at DH2022.

September 20, 2023

### Selected Work Experience

#### **NYC Health + Hospitals**

Ithaca, NY

Siegel Family Endowment PiTech PhD Impact Fellow

Jun 2023 - Aug 2023

- Evaluated the impact of current policies at relieving nurses' alert fatigue using data analysis.
- Provided design recommendations to improve the integration of medical alerts within nurses workflows after having conducted and analyzed interviews.

Cornell University Ithaca, NY

Teaching Assistant for Studying Social Inequality with Data Science

Jan 2023 - May 2023

- I won an **Outstanding Teaching Award**, wohoo!
- Delivered a lecture on non-parametric estimation of causal effects.
- Curated this independent investigation students conducted over multiple classes.

#### **University of Bologna**

Bologna, Italy

Research Assistant

Aug 2020 - Jul 2021

- Built a pipeline to collect and disambiguate publication data from Microsoft Academic Graph, Crossref, OpenAIRE and OpenCitations.
- Queried and manipulated 275M+ bibliographic and citation records using MongoDB and multiprocessing with Ray.

#### **Publications**

Under review User Needs and Peer Support in Endometriosis Online Communities

Federica Bologna, Rosamond Thalken, David Mimno, Matthew Wilkens

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

## Fun facts:)\_

I am obsessed with poetry, cats, yoga, thrift-shopping and binge-watching animes.

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