

# LAURA HAMBRIDGE

Data Analyst | Computational Linguist

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## EDUCATION

University at Buffalo 📅 Feb 2022 📍 Buffalo, NY  
M.S. Computational Linguistics

Capstone project: "Comparing Per-Language Performance in a Many-to-Many Machine Translation System"  
CGPA: 3.7/4.0

## EXPERIENCE

📅 Dec 2022 - present Machina Cognita Technologies  
Data Scientist

- Developed world state model derived from natural language for use in battle environments.
- Developing toolkit for training vessel trajectory-prediction models.

📅 Aug 2021 - Apr 2022 Causality Across Languages, SUNY  
Research Assistant 👁️ [Jürgen Bohnemeyer, Professor, Linguistics](#)

- Sought to find if the way people assign responsibility for events and outcomes is dependent on their culture. 🔗 [CAL blog](#)
- In R, used linear regression and ANOVA for confirmatory analysis and conditional inference trees and random forests for exploratory analysis on ordinal and categorical data from sociolinguistic experiments.

📅 Sept 2020 - Jan 2022 The Baldy Center for Law & Social Policy, SUNY  
Research Assistant 👁️ [Amy Semet, Associate Professor, Law](#)

- Sought to find if a legal case opinion's author could be predicted based on word choice alone.
- Extracted information from approx. 7k legal documents using regular expressions and normalized to optimize for analysis.
- Built both a simple neural network and a statistical model driven by tf-idf to predict the author (out of about 27 authors).

📅 May 2021 - Aug 2021 Natural Language Understanding Laboratory, Jacobs School of Medicine and Biomedical Sciences, SUNY  
Intern 👁️ [Peter Elkin, Professor, Biomedical Informatics](#)

- Developed a web-based user interface for biomedical researchers to extract a csv of medical terms, codes for such terms, and relationships between such terms from any input text. 🔗 [NLU Lab](#)

📅 Mar 2020 - Nov 2020 Tesserae, University of Notre Dame & SUNY  
Volunteer Backend Engineer 👁️ [Neil Coffee, Professor, Classics](#)

- Implemented [sound-matching feature](#) and accompanying tf-idf based algorithm in Python for [version 5](#) of Tesserae, a project developed to aid scholars in comparing classical Greek and Latin texts.

## INTERESTS

trustworthy AI   natural language understanding   language modeling   machine translation   historical linguistics  
linguistic typology   under-served languages   automated speech recognition   cognitive science   data analysis

## COURSEWORK

- Computational Linguistics
- Machine Learning
- Information Retrieval
- Quantitative Methods
- NLP & Text Mining
- Syntax
- Semantics
- Cognitive Science

## LANGUAGES

English   ●●●●●●  
Spanish   ●●●●●●  
Ukrainian   ●●●●●●  
German   ●●●●●●