

Current Position

Johns Hopkins University Center for Digital Humanities
Postdoctoral Researcher

Baltimore, MD
2021-Present

Education

University of California, Los Angeles
PhD in English Literature
Dissertation: *Speech as Writing: Literary Dialect Orthography in the United States 1790-1930*

Los Angeles, CA 2012–2021

University of Illinois Urbana-Champaign
Bachelor of Arts in English, Highest Honors

Urbana, IL
2008–2012

Research and Teaching

My primary research interests are 19th century American literature, digital and computational humanities, and machine learning. My work aims to apply cutting edge techniques from computer science and computational linguistics to literary research and pedagogy.

My current project employs pretrained machine learning language models to align words rendered in nonstandard literary orthography with their “standard” equivalents. This research has implications both in computer science, where researchers have previously evaluated these models’ orthographic abilities in the context of unintentional misspelling and modern variations, and in literary criticism, where a systematic author-by-author investigation of literary orthographic variation in the 19th and early 20th century has yet to be performed. This is an extension of my dissertation, which analyzed orthography using a more traditional computational perspective. It is viewable with a custom-programmed interactive web interface [here](#).

My research also centers on the use of simulation and games for teaching. This has included writing a video game translation of Poe’s short story “William Wilson” which was subsequently reviewed by Amber LaPiana in *Poe Studies* 47, “Playing Poe,” as well as a [computational simulation](#) of the “Numerete,” an early neural-inspired computational model created at the University of Illinois.

Courses Taught:

Introduction to Digital Humanities	Literatures in English 1700-1850
Introduction to Computational Humanities	Critical Reading and Writing
Literatures in English 1850-Present	Major American Authors

Publications and Presentations

- Presentation: “Pretrained Transformer Models for the Alignment of Orthographic Variants” MASC-SLL (2022)
- Presentation: “BERT: Structure and Knowledge” CLSP Large Language Model Bootcamp (2022)
- Publication: “Pym’s Games” in *Poe Studies: History, Theory, Interpretation*. Volume 47.
- Presentation: “Poe, Gaming and the Remediation of Horror Tropes”, UC Davis Contours of Algorithmic Life conference (2014)
- Presentation: “Reading Algorithmic Translations” panel, UCLA Southland Conference (2014)

Leadership and Service

2019. Panel moderator, UCLA EPIC Humanities Now: Transformative Teaching conference, Innovative Teaching with Technology Panel

2018. Graduate student member, UCLA faculty search committee (New Methods in Literary Criticism) **2015.** Participant, UCLA Mellon Seminar – “Digital Gateway.” Produced a functioning prototype of a digital text annotation system.

2014. Technology consultant, UCLA Digital Art History Summer Institute.

Honors and Awards

2019-2020 UCLA Department of English Dissertation Fellowship

2013 and 2014 UCLA Graduate Summer Research

Mentorship fellowship

2011 Robert D. Novak Scholarship

Professional Experience

UCLA Department of English

Los Angeles, CA

Teaching Assistant

2015–2021, 2013–2014

- Courses taught include early United States literature, science fiction, survey courses covering 19th and 20th century anglophone literature and writing composition.
- Designed and solo taught literature-centric composition classes for non-major students.
- Facilitated discussion sessions and walking tours for an interdisciplinary summer program in Florence, Italy (Summer 2019).

Contract Programmer, Various Employers

Los Angeles, CA

UCLA Writing Programs

June 2019–October 2019

- Fixed bugs and added features to a live-use scheduling full stack web application written in Python and Javascript (Vue.js).

Professor Rob Watson

2016

- Employed Python and NLTK to produce an analysis of repetition, synonymy and antonymy across Shakespeare’s corpus. Results published as a part of “Lord Capulet’s Lost Compromise” *Renaissance Drama* 43.1. (DOI: 10.1086/680449).

Networked Labor Project

2015

- Provided programming support to Prof. Toby Higbie’s [Networked Labor](#) project. Cleaned and analyzed network graph data using Python.

UCLA Digital Humanities Program

Los Angeles, CA

Teaching Assistant

September 2018–December 2018

- Facilitated technical lab sessions for an introduction to digital humanities class. Designed technical and theoretical instructional materials.

UCLA Humanities Technology

Los Angeles, CA

Research and Instructional Technology Consultant (RITC)

2014–2015

- Supported a Moodle-based educational content management system.
- Trained faculty in the use of software tools for use in both pedagogical and research projects.
- Provided programming and data support for faculty research projects, including authoring a full-stack solution for play text annotation using Python (Django) and Javascript.