# Mackenzie Hanh Cramer

Fun Fact: I am on in the top 1% of players on the 2048 global leaderboard and have crocheted 4 blankets mackenzie.hanh@gmail.com | https://mackenziehanhcramer.github.io/

# **EDUCATION**

#### University of California, Berkeley

School of Information

**Berkeley, California** *August 2025 - Present* 

Master of Information Management and Systems

# University of California, Berkeley

Berkeley, California

GPA 3.72

August 2021 - December 2024

- BA in Cognitive Science, Honors Student
- BA in Data Science, Domain Emphasis in Cognition
- Semester Abroad Spring 2024 at Yonsei University in Seoul, South Korea

#### WORK EXPERIENCE

# Teaching Assistant, Grading and Assignments Lead

Berkeley, California

Course: Data, Inference, and Decisions

August 2025 - Present

- Lead discussion sections of 30-90 students and hosted office hours
- Created assignments and helped make exams, posted resources on website
- Maintained and shared assignment resources across 3 Github repositories
- Assigned staff to grading and oversaw student's regrade requests

#### **Bancroft Library Student III**

Berkeley, California

Under Lorna Kirwan, Bancroft Public Services

May 2025 - Present

- Working circulation desk and registration desk to assist patrons
- Process and page materials for duplication and permissions requests
- Aid curators for pulling items for exhibits, deliver items to and from preservation for marking

#### **Emotect AI Intern**

San Francisco, California

Under David Jiang, Mark Barger Elliot

June 2025 - July 2025

- Constructed 4-stage annotation task and guide which was employed by the team for AI Model
- Design for optimizing model precision using Microsoft Excel, Google Sheets, Google Docs, and Microsoft Word Docs

#### **Bancroft Library Student II**

Berkeley, California

Under Iris Donovon, Bancroft Public Services

July 2022 - May 2025

- Worked with programs ALMA and AEON in tracking and identifying patron requests
- Leveraged Microsoft Excel spreadsheets and Microsoft Word for data entry and reports
- Handling materials in UC Berkeley archives paging, barcoding, retrieving, reshelving, and organizing various different items
- Trained 5+ new employees and was responsible for scheduling personal work shifts

Reader

Berkeley, California

January 2025 - May 2025

Course: Natural Language Processing

- Creating homework and coding assignments in Python
- Communicated during office hours for students and offered feedback towards questions concerning Natural Language Processing (NLP), assignments, and course information
- Formulated organizational system using Google Suite, specifically Google Sheets

## **Undergraduate Research Assistant**

Berkeley, California

Under David Bamman, NLP Research

February 2023 - December 2024

- Applied NLP techniques in Python to analyze datasets, identify patterns and new insights within the fields of digital humanities and cultural analytics
- Annotated various datasets, scrutinized data guidelines to increase clarity and reproducibility
- Engineered visualizations and conducted analyses to monitor performance trends and identify patterns

UCEAP Intern Seoul, Korea

Under Hwanho Noh at Barun ICT

March 2024 - June 2024

- Researched and pitched article ideas regarding data privacy and security
- 3 columns concerning subjects including AI chatbots modeled after deceased people, low-resource languages and lack of AI accessibility, and the privacy concerns of bioinformatics

## **Summer Data Analytics Intern**

Remote, United States

June 2023 - August 2023

- Under Stephen Zander at Evolent Health
- Pioneered prediction model for time between biopsy and cancer treatment using Python
- Inspected insurance and membership claims using SQL, extracted Time Series measurements
- Collaborated with stakeholders such as health care experts, data scientists, and business professionals

# **Data Analytics Intern**

Remote, United States

*Institute for Youth in Policy* 

January 2023 - July 2023

- Produced data analytics for the data-education division, with focuses on identifying and measuring polarity of different political topics and potential improvements on high school curriculums
- Visualized data from workshops using Python and JASP for comprehensive statistical analysis.
- Gave feedback on others' visualizations and suggested improvements for clarity and minimized bias

Data Science Mentee Berkeley, California

Undergraduate Laboratory of Data Science

September 2021 - June 2022

- Aided in production of prediction model for number of COVID-19 cases in the US by sourcing data and clean data to extract trends
- Wrote, produced, and organized poster that we presented at poster convention at conclusion of the program and semester

## **PROJECTS**

## **Honors Thesis: Analyzing Descriptions in Novels**

Berkeley, California

Mackenzie Cramer

August 2024 - December 2024

- Extracted characters information from 5,360 novels with Named Entity Recognition (NER) and NLP
- Mapped characters' descriptions onto their roles to identify common descriptions in varying genres
- Produced 20+ page report alongside visualizations and trend explanations

## **Youtube Apology Analysis**

Berkeley, California

Mackenzie Cramer, Sabrina Baur

August 2023 - December 2023

- Employed NLP techniques in order to analyze patterns that arise among Youtube Apology videos
- Used Python while employed NLTK, sequence alignment, coreference chains, and other techniques
- Sourced, collected, and cleaned dataset and produced visualizations and analyses of trends

## **PUBLICATIONS**

# **Measuring the Stories in Contemporary Songs**

David Bamman, Sabrina Baur, Mackenzie Hanh Cramer, Anna Ho, Thomas McEnaney <a href="https://osf.io/preprints/socarxiv/5vs9c">https://osf.io/preprints/socarxiv/5vs9c</a> v1

August 2025

Abstract: Lyric poetry--the poetry of song--is often defined in opposition to narrative. In this work, we examine this relationship by carrying out an empirical study to measure the degree of narrativity present in contemporary songs, using a dataset of popular (Billboard Hot 100) and prestigious (Grammy-nominated) songs spanning 1960-2024. While we might expect the 1960s (with ballad-driven

folk singers like Joan Baez, Bob Dylan and Simon & Samp; Garfunkel) to be a high-water mark for narrativity, we find the opposite: narrativity has been steadily increasing over this period, largely due to the rise of the strongly narrative genres of hip hop and rap. We also find that it is a marker of prestige for country music, with Grammy-award nominated "Best Country" songs displaying significantly higher narrativity rates than non-nominated songs from the same album.

#### **Multimodal Conversation Structure Understanding**

Kent K. Chang, Mackenzie Hanh Cramer, Anna Ho, Ti Ti Nguyen, Yilin Yuan, David Bamman https://arxiv.org/pdf/2505.17536 May 2025

Abstract: Conversations are usually structured by roles -- who is speaking, who's being addressed, and who's listening -- and unfold in threads that break with changes in speaker floor or topical focus. While large language models (LLMs) have shown incredible capabilities in dialogue and reasoning, their ability to understand fine-grained conversational structure, especially in multi-modal, multi-party settings, remains underexplored. To address this gap, we introduce a suite of tasks focused on conversational role attribution (speaker, addressees, side-participants) and conversation threading (utterance linking and clustering), drawing on conversation analysis and sociolinguistics. To support those tasks, we present a human annotated dataset of 4,398 annotations for speakers and reply-to relationship, 5,755 addressees, and 3,142 side-participants.

## Speak, Memory: An Archeology of Books Known to Chat-GPT/GPT-4

*Kent K. Chang, Mackenzie Cramer, Sandeep Soni, David Bamman* https://aclanthology.org/2023.emnlp-main.453/

October 2023

Abstract: In this work, we carry out a data archaeology to infer books that are known to ChatGPT and GPT-4 using a name cloze membership inference query. We find that OpenAI models have memorized a wide collection of copyrighted materials, and that the degree of memorization is tied to the frequency with which passages of those books appear on the web. The ability of these models to memorize an unknown set of books complicates assessments of measurement validity for cultural analytics by contaminating test data; we show that models perform much better on memorized books than on non-memorized books for downstream tasks. We argue that this supports a case for open models whose training data is known.

# **VOLUNTEERING**

## **Ethnic Studies Curriculum Advisor**

Santa Rosa, California

With Ethnic Studies Course Curriculum

January 2021- March 2021

- Worked on committee focused on High School English Literature Ethnic Studies course, to be deployed by Santa Rosa City School District
- Pitched topics to teach, promoting texts and books to be taught to students
- Worked with teachers, other students, and aided in course development

## **SCHOLARSHIPS**

#### **Redwood Empire Chinese Association**

Sonoma, California

March 2021

Awarded to graduating high school seniors of Asian descent for excellent academic performance and community service, with plans to pursue post-secondary education.

## ADDITIONAL WORK

SMASH Panel Berkeley, California

Hosted by Anoop Kaur and Maggie Melone-Echiburú

July 2024

Panel Member for SMASH (Summer Math And Science Honors) Academy at UC Berkeley Campus and discussed admissions, taking Computer Science courses, and advice for applying and networking