Mackenzie Hạnh Cramer

Fun Fact: I am on in the top 1% of players on the 2048 global leaderboard and have crocheted 4 blankets
+1 (510) 709 7556 | mackenzie.hanh@berkeley.edu | https://mackenziehanhcramer.github.io/

EDUCATION

University of California, Berkeley   **Berkeley, California**
Graduation December 2024, GPA 3.72   *August 2021 - Present*
- BA in Cognitive Science, Honors Candidate
- BA in Data Science, Domain Emphasis in Cognition
- Semester Abroad Spring 2024 at Yonsei University in Seoul, South Korea

WORK EXPERIENCE

Undergraduate Research Assistant   **Berkeley, California**
Under David Bamman, NLP Research   *February 2023 - Present*
- Applied Natural Language Processing (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 data visualizations and conducted analyses to monitor performance trends and identify patterns.

Bancroft Library Student Worker   **Berkeley, California**
Under Iris Donovon   *July 2022 - Present*
- Worked with programs ALMA and AEON in tracking and identifying patron requests
- 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

UCEAP Intern   **Seoul, Korea**
Under Hwanho Noh at Barun ICT   *March 2024 - June 2024*
- Researched and pitched article ideas regarding data privacy and security, resulting in 3 monthly 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   **Arlington, Virginia**
Under Stephen Zander at Evolent Health   *June 2023 - August 2023*
- Pioneered prediction model for time between biopsy and cancer treatment using Python
- Inspected insurance claims and membership claims using SQL servers and developed methodology to extract Time Series measurements
- Collaborated with various key stakeholders such as: health care professionals, senior data scientists, and business professionals

Data Analytics Intern   **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

Monthly Columnist   **Kenwood, California**
Under Melissa Dowling at The Kenwood Press   *October 2020 - April 2021*
- Wrote 7 columns concerning education and the effect of political and social movements on it
- Responsible for outlining, writing, and editing articles and organized timelines for submission and feedback before print
- Surveyed and gathered opinions from community members on articles' topics

PROJECTS

Maria Carrillo Diversity Improvement Proposal   **Santa Rosa, California**
Mackenzie Cramer, Zoya Ahmed   *July 2020 - December 2020*
- Reached out and worked closely with district officials, school staff, and students within the Santa Rosa City School District
- Developed surveys, 300+ responses, and researched history of policies in order to suggest new and effective ways to connect and help minority and underserved students
- Detailed district, administrative, and in-class changes to address unequal treatment of students
- Presented 90+ page proposal findings to teachers, administrators, and interested district officials

Youtube Apology Analysis   **Berkeley, California**
Mackenzie Cramer, Sabrina Baur   *August 2023 - December 2023*
- Employed Natural Language Processing (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

Speak, Memory: An Archeology of Books Known to Chat-GPT/GPT-4
Kent K. Chang, Mackenzie Cramer, Sandeep Soni, David Bamman   *October 2023*
https://aclanthology.org/2023.emnlp-main.453/

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

Asian American Union   **Santa Rosa, California**
Founder and President   *August 2020- May 2021*
- Created club for Asian students at my high school in order to promote community, support, and diversity inclusion

- Spearheaded meetings, initiated discussions, and collaborated with staff to establish club
- Fundraised for, sketched, and painted mural symbolizing club and pride for the club's members and their cultures

Universal Community for Change   **Santa Rosa, California**
Member   *August 2020- May 2021*
- Selected to be member for group formed by principal which focused on efforts to improve relations between students and staff
- Brainstormed ideas and acted as ambassador for student body
- Worked with school administration to develop techniques and approaches to improve equity

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

One Nation Together   **Sonoma, California**
Ep. 5: Zoya Ahmed and Mackenzie Cramer   *November 2020*
https://open.spotify.com/episode/6AxvDxZB4j8huDkLw4KBCK
Guest starred on One Nation Together Podcast hosted by Aarav, Idan, and Reynalda to discuss Universal Community for Change (UCC) and efforts to make our high school campus a safe space for individuals of all racial and sexual identities.