

# Kay Royo

510.619.4645

[kroyo@ucdavis.edu](mailto:kroyo@ucdavis.edu) | <https://www.linkedin.com/in/kayr/> | <https://github.com/kayannr> | <https://kayannr.github.io/>

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## SUMMARY

A self-motivated, assertive, and strategic Data Analyst with comprehensive analytical, logical, and communication skills. An avid learner who is keen on utilizing technical tools and methods to solve and simplify complex problems. Adept at working independently and collaborating with teams across multiple functions. Highly detail-oriented and versatile with 3 years of experience in research, data acquisition, and data analysis. Exceptional and effective time management, decision-making, and organization skills continuously enhanced by academic and professional experiences. Capable of building long-lasting relationships with clients and colleagues at all organizational levels. Driven to explore various strategies and methods to provide high-quality work and exceed expectations.

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## TECHNICAL SKILLS

**Web Technologies:** JavaScript, HTML5, CSS3, AJAX, jQuery, D3, NodeJS, JSON, Plotly, Leaflet, Bootstrap, API

**Programming Languages:** R, Python, SQL, VBA, C++

**Databases:** SQL, MongoDB

**IDEs:** Visual Studio, RStudio, XCode, Adobe Photoshop

**Software:** Tableau, Pandas, Git, ArcGIS, gINT

**Office Tools:** MS Word, MS Excel, MS Outlook, MS PowerPoint

**Other:** Web-Scraping, Regular Expression, Spark, Big-Data, Machine Learning, Hadoop/Hive, ETL, Data Manipulation and Cleaning, Data Visualization, Data Analysis, Natural Language Processing, Natural Language Generator, Github, Jupyter Notebooks, Project Management, Technical Writing

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## EDUCATION AND CERTIFICATIONS

**University of California – Davis**

September 2021 – May 2023

*Master of Science (Statistics)*

**ESRI – MOOC**

December 2020

*Spatial Data Science Certificate*

- A 6-week online course focused on data engineering and visualization, suitability modeling, pattern detection, space-time pattern mining, and object detection with deep learning.

**University of California - Berkeley (Extension)**

August 2020

*Data Analytics Certificate*

- A 24-week intensive program focused on gaining technical programming skills in Excel, VBA, Python, R, JavaScript, SQL Databases, Tableau, Big Data, and Machine Learning
- Grade: 4.0

**California State University – East Bay**

July 2019

*Bachelor of Science (Geoscience)*

- Honor's and Dean's Listed
  - Research Assistant (Department of Earth and Environmental Sciences)
  - Event Coordinator (Earth and Environmental Sciences Club)
  - Scholarship Award Recipient (East Bay Mineral Society)
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## PROJECTS

**Word Wright**

December 2020

<https://github.com/howec/wordwright> | <https://devpost.com/software/wordwright>

The project aims to promote connecting with loved ones through an interactive story writing web application that uses a natural language generator to provide a story prompt based on a user's choice of writing style.

- Successfully implemented Natural Language Generator model and Data Cleaning
- Methods and Tools used: Natural Language Generator, SQL, Python, JavaScript, HTML, CSS, Bootstrap, Regular Expression, PyTorch, ETL for Data Cleaning, Web API

## Music Genre Prediction

August 2020

<https://github.com/etarakci/music-genre-prediction> | <https://music-genre-prediction.herokuapp.com/>

The project delves into the relationship between song lyrics, titles, artists, and genre using machine learning models that determine the prevalent words in the song lyrics to categorize a song into a genre.

- Successfully completed front-end tasks including interactive web development, web design, and front-end to back-end connection
- Methods and Tools used: Machine Learning, SQL, Python, JavaScript, HTML, CSS, Bootstrap, ETL for Data Cleaning, Web API

## US Homeless Population

July 2020

<https://github.com/kayannr/US-Homelessness> |

<https://mengye22.github.io/US-homelessness/master/templates/index.html>

The project explores the homeless population and homeless shelter locations for each state in the United States. The final datasets generated after performing Web-scraping and ETL are loaded to its destination, a SQL database.

- Effectively performed ETL (Extract, Transform, Load) on the homeless shelter locations dataset that is scraped from the web and used Regular Expressions to clean gathered dataset. Designed an interactive choropleth map to display homeless population data for each state.
- Methods and Tools used: Web-scraping, RegEx (Regular Expressions), ETL (Extract, Transform, Load), JavaScript, Python, HTML, CSS, D3

## City Bike Analytics

June 2020

<https://github.com/kayannr/Citi-Bike-Analytics> |

[https://public.tableau.com/profile/kay.royo#!/vizhome/citibike\\_analytics/NYCBIKEANALYSIS](https://public.tableau.com/profile/kay.royo#!/vizhome/citibike_analytics/NYCBIKEANALYSIS)

A Data Dashboard, Story, or Report that is created using Tableau, which includes variety of visualizations of aggregated data found in the New York City Bike Trip History Logs

- Designed various visualizations for numerous types of analysis
- Tools used: Tableau

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## PROFESSIONAL EXPERIENCE

### Graduate Student Assistant

September 2021 – Present

UC Davis

- Assist faculty members by performing teaching-related duties in the Department of Biomedical Engineering and Graduate School of Management

### Project Geologist

September 2019 – June 2021

ATC Group Service LLC

- Modernizes and automates detailed technical reports associated with Phase II Environmental Site Assessments to present data to clients which results in 30% increase in productivity and successfully help maintain client relations
- Provides project planning and management assistance which lead to increase in efficiency and saving up to \$1000 in project funds
- Analyzes historical subsurface environmental data to determine the locations for new soil vapor and groundwater water monitoring wells using Microsoft Excel

### Research Assistant

September 2018 – November 2020

CSU – East Bay

- Collaboration with Dr. Jose Rosario (CSUEB – Department of Earth and Environmental Sciences) to analyze scientific data gathered to determine the correlation between sediment deposition and the changes in sea level and climate in the San Francisco Bay Area. Research findings will be presented at the AGU (American Geophysical Union) Conference and published as a final scientific research paper.

### Geophysical Survey Intern

June - July 2018

Canary Islands Volcanological Institute (INVOLCAN) and Geotenerife

- Efficiently acquired subsurface electromagnetic data by operating a Multi-Channel Geophysical Survey System and installing Magnetotelluric (MT) and seismic survey stations
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