

Kay Royo

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SUMMARY

A self-motivated and strategic Data Analyst with comprehensive analytical and communication skills. An avid learner driven by curiosity who is keen on utilizing technical tools and methods to solve complex problems and develop data-driven insights. Adept at working independently and collaborating with teams. Highly detail-oriented and solution-focused with experience in research, data acquisition, and data analysis. Capable of building long-lasting relationships with clients and colleagues at all organizational levels. Driven to explore various methods to provide high-quality work and exceed expectations.

SKILLS

Programming Languages:	R (Advanced), Python (Advanced), SQL (Advanced)
Web Technologies:	HTML5, CSS, Javascript, jQuery, D3.js, Bootstrap
Database Management:	PostgreSQL, MongoDB, ERD, Relational Databases
Data Visualization:	Tableau, ArcGIS, Plotly, Leaflet, Matplotlib, Seaborn
Data Collection & Cleaning:	ETL, Web-Scraping, API, JSON, RegEx
Data Analysis:	Statistical Modeling and Analysis, Hypothesis Testing, Regression Analysis, Time Series Analysis, Exploratory Data Analysis, Text Analysis
Machine Learning:	SGD, NLP, NLG, kNN, Scikit-learn, PyTorch
Libraries:	Pandas, NumPy, NLTK, SciPy, Statsmodels, PySpark, caret, forecast
IDEs:	Visual Studio, RStudio, Jupyter Notebook, JupyterLab
Soft Skills:	Collaboration, Communication, Adaptability, Problem-solving
Other:	Git, GitLab, Github, MS office Suite, Databricks, Object-oriented programming, Interactive reports, Technical writing, Project management

EDUCATION AND CERTIFICATIONS

- University of California – Davis** 09/2021 – 06/2023
Master of Science (Statistics – Data Science Concentration)
- Coursework: Time Series Analysis, Statistical Machine Learning, Artificial Intelligence, Statistical Data Science, Big Data and High-Performance Statistical Computing, Statistical Research Methods, Multivariate Data Analysis, Probability Theory, Mathematical Statistics, Data & Web Technologies for Data Analysis, Web Science Research Methods, Computational Statistics, Observational Studies
- ESRI – MOOC** 09/ 2020 – 12/2020
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)** 02/2020 – 08/2020
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
- California State University – East Bay** 09/2014 – 07/2019
Bachelor of Science (Geoscience)
- Research Assistant (Department of Earth and Environmental Sciences)
 - Event Coordinator (Earth and Environmental Sciences Club)
 - Scholarship Award Recipient (East Bay Mineral Society)

EXPERIENCE

Graduate Student Assistant

09/2021 – 12/2022

UC Davis

- Provided effective teaching support for business analytics, accounting, and entrepreneurship courses in the Department of Biomedical Engineering and Graduate School of Management.
- Monitored and evaluated student progress, providing feedback and recommendations for improvement, resulting in increased student engagement and learning outcomes.

Project Geologist

09/2019 – 06/2021

ATC Group Services LLC

- Collaborated with cross-functional teams to develop and implement environmental site assessments, ensuring compliance with regulatory requirements and project objectives.
- Generated and reviewed technical reports to ensure accuracy and consistency, providing high-quality deliverables to clients on time and within project scope.
- Implemented quality control procedures to monitor and ensure the accuracy of reports, resulting in improved data integrity and client satisfaction.
- Provided valuable project management support and achieved cost savings of up to \$1000.
- Maintained positive relationships with local regulatory agencies by utilizing effective communication and interpersonal skills, resulting in successful project delivery within project timelines.

Research Assistant

09/2018 – 11/2020

CSU – East Bay

- Conducted fieldwork and laboratory analysis, including sample collection and processing, data entry, and quality control checks, ensuring accuracy and completeness of data.

Geophysical Survey Intern

06/2018 – 07/2018

Canary Islands Volcanological Institute (INVOLCAN) and Geotenerife

- Operated complex geophysical equipment and instrumentation with a high level of efficiency, ensuring accuracy and reliability of data collection.
- Collaborated with cross-functional teams to develop and implement data acquisition plans, ensuring adherence to project scope and objectives.

PROJECTS

Popular Music Analysis

03/2023

<https://kayannr.github.io/top-hits/> | <https://github.com/kayannr/top-hits>

Analysis of popular songs across various countries that involves data collection using API, data wrangling, data visualization, descriptive and exploratory analysis, topic modeling, feature selection, predictive modeling, and presenting findings in an HTML-based report.

- Methods & Tools: **Python, RegEx, HTML5, NumPy, Pandas, API, Requests, NLTK**

Sports Statistics

09/2022

<https://github.com/kayannr/sportstats>

Historical Olympics games data analysis that involves data wrangling, data quality assessment, data deduplication, data visualization, hypothesis testing, descriptive and exploratory analysis, and inferential analysis using graphical and statistical methods.

- Methods & Tools: **SQL, Databricks, Python, PandaSQL, Pandas, SQL Window functions**

Word Wright

12/2020

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

An interactive web application developed for Devpost Hackathon that includes a story prompt generator based on choice of writing style using a Natural Language Generator model.

- Methods & Tools: **SQL, Python, PyTorch, JavaScript, HTML, CSS, Bootstrap, RegEx, ETL, Web API, React.js, Data Wrangling**

US Homeless Population

07/2020

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

An analysis of homeless population in the US showcased on an interactive website that involves data collection, data wrangling, ETL, and interactive visualizations

- Methods & Tools: **Web-scraping, RegEx, ETL, JavaScript, Python, HTML5, CSS, D3.js, Leaflet**
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