Kay Royo

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SUMMARY

A self-motivated and strategic Data Analyst/Scientist with comprehensive analytical, logical, 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 solutions. Adept at working independently and collaborating with teams across multiple functions. Highly detail-oriented, solution-focused, and versatile with 3 years of experience in research, data acquisition, and data analysis. 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.

SKILLS

Programming Languages: Python, R, SQL

Web Technologies: HTML5, CSS, Javascript, jQuery, D3, Bootstrap

Database Management Systems: PostgreSQL, MongoDB

IDEs: Visual Studio, RStudio, Jupyter Notebook, JupyterLab

Soft Skills: Teamwork, Communication, Adaptability, Problem-solving

Other: Tableau, API, JSON, Git, GitLab, Github, ArcGIS, gINT, MS office Suite, R/Python Libraries, Hypothesis Testing, Regression Analysis, Web-Scraping, Regular Expression, Spark, Machine Learning, Hadoop/Hive, Pandas, NumPy, Plotly, Leaflet, EDA, ETL, ERD, Relational Databases, Flask, Scikit-learn, Statistical Modeling and Analysis, Time Series Analysis, Data Cleaning, Data Mining, Data Wrangling, Data Visualization, Data Analysis, Technical Writing, Project Management

EDUCATION AND CERTIFICATIONS

University of California – Davis   September 2021 – June 2023
Master of Science (Statistics –Data Science Concentration)
- Coursework: Time Series Analysis, Statistical Machine Learning, Machine Learning & Discovery, Statistical Data Science, Big Data and High-Performance Statistical Computing, Regression Analysis, Multivariate Data Analysis, Probability Theory, Mathematical Statistics, Data & Web Technologies for Data Analysis, Web Science Research Methods

ESRI – MOOC   September 2020 – 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)   February 2020 – 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

California State University – East Bay   September 2014 – August 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)

PROJECTS

Popular Music Analysis   March 2023
https://kayannr.github.io/top-hits/ | https://github.com/kayannr/top-hits
Conducted an analysis of popular songs in different countries using graphical, statistical, and machine learning techniques. Utilized API to collect relevant data, and performed several data manipulation and analysis tasks, such as data wrangling, visualization, descriptive and exploratory analysis, topic modeling,

feature selection, and predictive modeling. Presented the findings in an HTML-based report.

- Methods and Tools used: Python, Regex, HTML5, NumPy, Pandas, API

Sports Stats   September 2022
https://github.com/kayannr/sportstats

Analyzed historical Olympics games dataset using SQL and PandaSQL. Performed data wrangling, data quality assessment, data deduplication, data visualization, hypothesis testing, descriptive analysis, exploratory analysis, and inferential analysis using graphical and statistical methods.

- Methods and Tools used: SQL, Databricks, Python, PandaSQL, Pandas, SQL Window functions.

Word Wright   December 2020
https://github.com/howec/wordwright | https://devpost.com/software/wordwright

Developed and implemented Natural Language Generator model using PyTorch that provides a story prompt based on a user's choice of writing style and performed data wrangling using Python and Regular Expressions to promote connecting with loved ones through an interactive story writing web application.

- Methods and Tools used: Natural Language Generator (NLG), SQL, Python, JavaScript, HTML, CSS, Bootstrap, Regular Expressions, PyTorch, ETL for Data Cleaning, Web API, React

Music Genre Prediction   August 2020
https://github.com/etarakci/music-genre-prediction | https://music-genre-prediction.herokuapp.com/

Completed front-end tasks including interactive web development, web design, and front-end to back-end connection using Python, HTML, CSS, Flask, and Javascript. Assisted with the development of a machine learning model to determine prevalent words in lyrics used to categorize a song into a genre.

- Methods and Tools used: Machine Learning (NLP & KNN), SQL, Python, JavaScript, HTML, CSS, Bootstrap, ETL, Web API, Heroku, Flask

US Homeless Population   July 2020
https://mengye22.github.io/US-homelessness/master/templates/index.html

Gathered data using web scraping method and Python. Effectively performed ETL on the scraped dataset using Python and Regular Expressions. Designed interactive choropleth map to display homeless population data for each state using D3, Leaflet, Python, HTML, Javascript, and CSS.

- Methods and Tools used: Web-scraping, Data Wrangling, RegEx (Regular Expressions), ETL, JavaScript, Python, HTML, CSS, D3, Leaflet

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PROFESSIONAL EXPERIENCE

Graduate Student Assistant   September 2021 – December 2022
UC Davis

- Provided effective teaching support for courses in the Department of Biomedical Engineering and Graduate School of Management including business analytics, accounting, and entrepreneurship

Project Geologist   September 2019 – June 2021
ATC Group Service LLC

- Automated and modernized detailed technical reports for Phase II Environmental Site Assessments, resulting in a 30% increase in productivity
- Maintained positive relationships with clients by effectively communicating progress and relevant information, while clarifying their needs
- Provided project planning and management assistance, leading to increased efficiency and cost savings up to $1000
- Utilized Microsoft Excel to analyze historical subsurface environmental data and identify optimal locations for new soil vapor and groundwater monitoring wells

Research Assistant   September 2018 – November 2020
CSU – East Bay

- Conducted a thorough analysis of scientific data collected to establish a connection between sediment deposition and the fluctuations in sea level and climate in the San Francisco Bay Area.

Geophysical Survey Intern   June 2018 - 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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