Elias Weston-Farber

Data Engineer / Data Manager

Location: Baltimore
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Accomplished Data Engineer and Manager with a proven track record in developing sophisticated data systems and enhancing data operations using advanced cloud technologies. Expert in deploying scalable systems, automating data workflows, and leading development teams to drive innovation and efficiency in academic and research environments.

GitHub: github.com/elias-jhsph Portfolio: eliastechlabs.com

Work Experience

Senior Cloud Engineer & Data Manager

Johns Hopkins School of Public Health, Baltimore

2023 - Present

- Engineered and implemented an automated system for DSMB reporting for nine different studies, replacing a manual approach that required five full-time analysts with one that now requires only a single analyst.
- Decreased cloud costs by 20% by migrating parts of the backend to Compute Engine while simultaneously improving system responsiveness and user engagement through the implementation of HTMX and WebSockets, enabling real-time feedback.
- Implemented a real-time Firebase database to ensure data synchronization across distributed environments.

Senior Research App Developer & Data Manager

Johns Hopkins School of Public Health, Baltimore

2020 - 2023

- Led and managed a team of six analysts and developers, successfully setting up seven studies on an analytic platform built on GCP, automating weekly reporting.
- Designed and implemented a system for real-time study data issue tracking and notifications, replacing a manual static file-based system and facilitating rapid response measures that supported a major publication.
- Developed tailored visualization and reporting solutions for research teams, integrating technologies such as Selenium and Scrapy to extract conflicts of interest data, and Plotly to create interactive reports.

Research App Developer

Johns Hopkins School of Public Health, Baltimore

2019 – 2020

- Developed a robust administrative data storage solution for managing records across 30+ METRC studies, leveraging custom Smartsheet & Google Sheets APIs and a cross-platform Electron application.
- Wrote multiple R packages and designed a Python+R Docker environment to standardize the computational environment for METRC study analysis.

Backend Developer and Data Scientist

Civicly Envolved, Chicago

2018 – 2019

 Led a team of interns in designing and implementing API-based data integration and management solutions, including geospatial data analysis using Google Cloud technologies.

Education

University of Maryland Baltimore County, Baltimore

Bachelor of Science in Environmental Science & Geography Bachelor of Arts in Political Science 2018

Technical Skills

• Languages: Python, R, JavaScript, SQL

- Frameworks/Libraries: Flask, Node.js, PyTorch, Pandas, Tidyverse, Shiny, Electron, HTMX
- Technologies: Docker, AWS, GCP, GitHub Actions, Firebase, OpenAI API
- Data Analysis Tools: Tableau, ArcGIS, QGIS, Plotly, ggplot2

Personal Coding Projects

- EliasTechLabs: Website for my consulting business that uses AWS Lambda functions, CloudFront, S3, and various other tools to create an interactive, high-performance website that remains cost-effective in the cloud. (Featuring an OpenAl-powered website assistant.)
- RSmartsheet: Developed an R package to interface with Smartsheet, used by health authorities to streamline project management.
- SearchIt: Designed an application for conducting systematic web searches, utilized by NGOs to gather and analyze public data.
- Jarvis: Created a packaged voice assistant application using OpenAI's GPT model, demonstrating capabilities in integrating AI into user-friendly applications.