

Alex Rosenblum

Data Scientist | 6 years corporate experience
he/him

Personal Information

arosenblum1@gmail.com
[Portfolio \(GitHub\)](#)
[LinkedIn](#)
Chicago, IL

Education

Data Science, MS

In Progress
DePaul University
Anticipated Graduation:
Spring 2023

Chemistry, BA

University of Iowa
Spring 2016

Data Skills

Advanced Regression Analysis
Programming Machine Learning Applications
Processing Big Data
Data Visualization

Technical Skills

SQL

Oracle, MySQL, PostgreSQL

Python

NumPy, Pandas, Scikit-Learn, Matplotlib

R

ggplot2, dplyr, tidyr

Hadoop Ecosystem

Hadoop Streaming, Hive, Pig, HBase, Spark, Storm

AWS

Tableau

Projects

Cluster Analysis of Billionaires

- Used K-Means and DBSCAN clustering algorithms to analyze a dataset of the world's billionaires compiled and published by the Peterson Institute for International Economics in 2014
- Engineered features to include data from multiple time points to minimize information loss without necessitating a time-series analysis

Performing NLP on Fox News Newsletters

- Applied the NLP techniques TF-IDF and VADER Sentiment Analysis to analyze a corpus of newsletters sent by a handful of Fox News publications
- Employed Principal Components Analysis and Linear Discriminant Analysis on the NLP outputs to characterize the difference in Fox News' messaging trends before and after the start of the COVID-19 pandemic

Regression Analysis of Chicago's Air Quality during the COVID-19 Pandemic

- Performed Simple Regression Analysis to quantify the change in Chicago's air quality due to traffic reduction caused by the shelter-in-place order issued at the onset of the pandemic.
- Reviewed literature to self-educate on the domain of air quality and wrote a summary of the research, with references, to introduce the project.

Data Science Highlights

Abbott Laboratories Diagnostics Division

March 2021 - Present

Scientist I, R&D

- Created a series of visualizations to model experimental and hypothetical calibration curves, informing next steps in the design of a photometric clinical chemistry assay.
- Designed and executed experiments to test various performance aspects of diagnostic assays in development.
- Routinely analyzed and communicated experimental data to both technical and non-technical audiences.

Abbott Laboratories Diagnostics Division

Aug 2017 – Aug 2019

Associate Scientist, Design Verification

- Reviewed experimental material stability data, interpreted outputs generated by the internal data management system, and verified that experimental data conformed to specifications outlined in study protocols.
- Conducted investigations into instances of nonconformance, often drilling down into data to help identify root cause.
- Identified instances in which data was not properly cleaned and communicated specific required data cleaning tasks to the responsible party.