

## Alden Felix

### Narrative

Data scientist pursuing a career in transforming data into information that can make a global impact. Proficient in coding with R and Python to collect, wrangle, and visualize data to be beautiful and easily understandable, perform and interpret regression analysis, and build machine learning models. Knowledgeable in writing SQL queries.

### Education

**Master of Science in Social Data Analytics and Research** December 2023 (Expected)  
*The University of Texas at Dallas, Richardson, Tx* GPA: 3.95/4.0

**Bachelor of Science in International Political Economy** December 2022  
*The University of Texas at Dallas, Richardson, Tx* GPA: 3.82/4.0, Magna Cum Laude\*

### Relevant Coursework

Data Visualization	Database Management	Data Collection/Production
Machine Learning	Applied Regression	Statistics, Calculus
Econometrics	Mathematical Economics	Upper-Level Economic Theory

### Skills

**Data Analysis:** R (Tidyverse), Python (Pandas, NumPy)

**Machine Learning:** R, Python: Supervised/Unsupervised, Random Forest, Clustering, NLP

**Regression Analysis:** R, Python - OLS, GLM

**Data Visualization:** Tableau, R (ggplot2), Python (Matplotlib, Plotly, Altair), R Shiny, Markdown, R Quarto

**Data Collection/Query:** R, Python, SQL, PostgreSQL

### Academic Projects - <https://aldenfelix.github.io/>

**Predicting Interstate Affinity using Machine Learning/Database Building** January 2023 – May 2023  
*Designed to generalize conflict prediction and assist the study of state affinity communities & network analysis*

- Built original database to compile relevant data that is spread across different sources
- Used Random Forests and Deep Learning to predict relationships between states

**Effect of Road Classification on Alcohol Related Crash Severity** August 2022 – December 2022  
*Designed to research the causal relationship between types of roads and the severity of alcohol-related crashes*

- Collected 27,000+ accidents in Collin County from Texas Department of Transportation
- Performed regression analysis using a logit model to answer hypothesis
- Built Shiny application for interactive exploratory data analysis and dashboard for presentation

**Exploring Human Mobility using Twitter Data** August 2022 – December 2022  
*Designed to explore effectiveness of twitter data for human mobility studies*

- Collected/scraped 1 million+ tweets using API and non-API methods
- Performed quantitative and qualitative analysis to explore effect of COVID-19 on mobility patterns

### Awards & Honors

\*Magna Cum Laude – Graduated in top 10% of class

December 2022