

Alden Felix

Narrative

Graduate student pursuing a Master of Science in data analytics with a concentration in socioeconomic analysis. Proficient in coding with R to collect, wrangle, and visualize data, 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: 4.0/4.0

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

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

Skills

Data Analysis: R, STATA, Excel

Regression Analysis: R - OLS, GLM, Continuous, Count, Dichotomous, Categorical, Bounded

Data Visualization: Tableau, R, R Shiny, R Markdown, R Quarto, Excel

Data Collection/Query: R, SQL, PostgreSQL

Academic Projects

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

Academic Excellence Scholarship, UT Dallas August 2019 – May 2023
Hobson Wildenthal Honors College/CV Honors, UT Dallas August 2019 - December 2022