Rueiyu Chang

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Education

University of California, Los Angeles

Expected Graduate June 2025

Bachelor of Statistic and Data Science, minor in Data Science in Engineering

Relavent Course/Project

Predictive Pricing Model for Used Sailboats Using Regression Analysis

2023.12

- Aimed to develop a mathematical model to predict used sailboat prices, incorporating factors for more accurate pricing insights for monohulled and catamaran sailboats. Built ETL pipelines to collect and analyze data from multiple sources, performing data cleaning and considering features like Length, Year, Beam, Average PPP, etc.
- Implemented Random Forest Regression and Linear Regression models to determine key factors affecting sailboat prices, with length and year as the most significant predictors via python. Conducted statistical tests (F-test, T-test, Chi-square, R-squared) to evaluate model accuracy and validate regional pricing impacts for sailboat types.
- Created a comprehensive report for a broker, developing a pricing prediction model with a stronger R² of 0.73 for catamarans compared to 0.40 for monohulled sailboats, highlighting key insights such as the impact of regional economic factors like PPP and length as the most significant predictor of prices.