Cost Analysis

STUDYING ABROAD

What we'll cover today

1. Problem Statement
2. Statistical Model
3. Key Tools
4. Literature Review
5. Progress Update

Problem Statement

THE PROBLEM

Prospective international students often struggle to estimate the total cost of studying abroad due to varying expenses like tuition, living costs, and additional fees across different countries and institutions.

THE GOAL

Develop a predictive model to estimate the total cost of studying abroad based on factors such as country, institution, and program duration, aiding students in financial planning.

Stat Model : MLR

Since it’s a predictive modeling problem, we will make use of Multi Linear Regression (MLR) to asses the impact of various factors on the dependent variable Cost.

Multi Regression

Multiple Linear Regression (MLR) models the relationship between a dependent variable and multiple independent variables. In this project, MLR will predict the total cost of studying abroad using factors like country, institution, and program duration.

Data set Selection

Cost of International Education

Cost of International Education: Comparative Financial Dataset for Global Study

Data Card | Code (24) | Discussion (1) | Suggestions (0)

About Dataset

This **Cost of International Education** dataset compiles detailed financial information for students pursuing higher education abroad. It covers multiple countries, cities, and universities around the world, capturing the full tuition and living expenses spectrum alongside key ancillary costs. With standardized fields such as tuition in USD, living-cost indices, rent, visa fees, insurance, and up-to-date exchange rates, it enables comparative analysis across programs, degree levels, and geographies. Whether you're a prospective international student mapping out budgets, an educational consultant advising on affordability, or a researcher studying global education economics, this dataset offers a comprehensive foundation for data-driven insights.

Description

Column	Type	Description
Country	`string`	ISO country name where the university is located (e.g., "Germany", "Australia").
City	`string`	City in which the institution sits (e.g., "Munich", "Melbourne").

View more

Usability 10.00

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Expected update frequency Annually

Tags

Education

Universities and Colleges

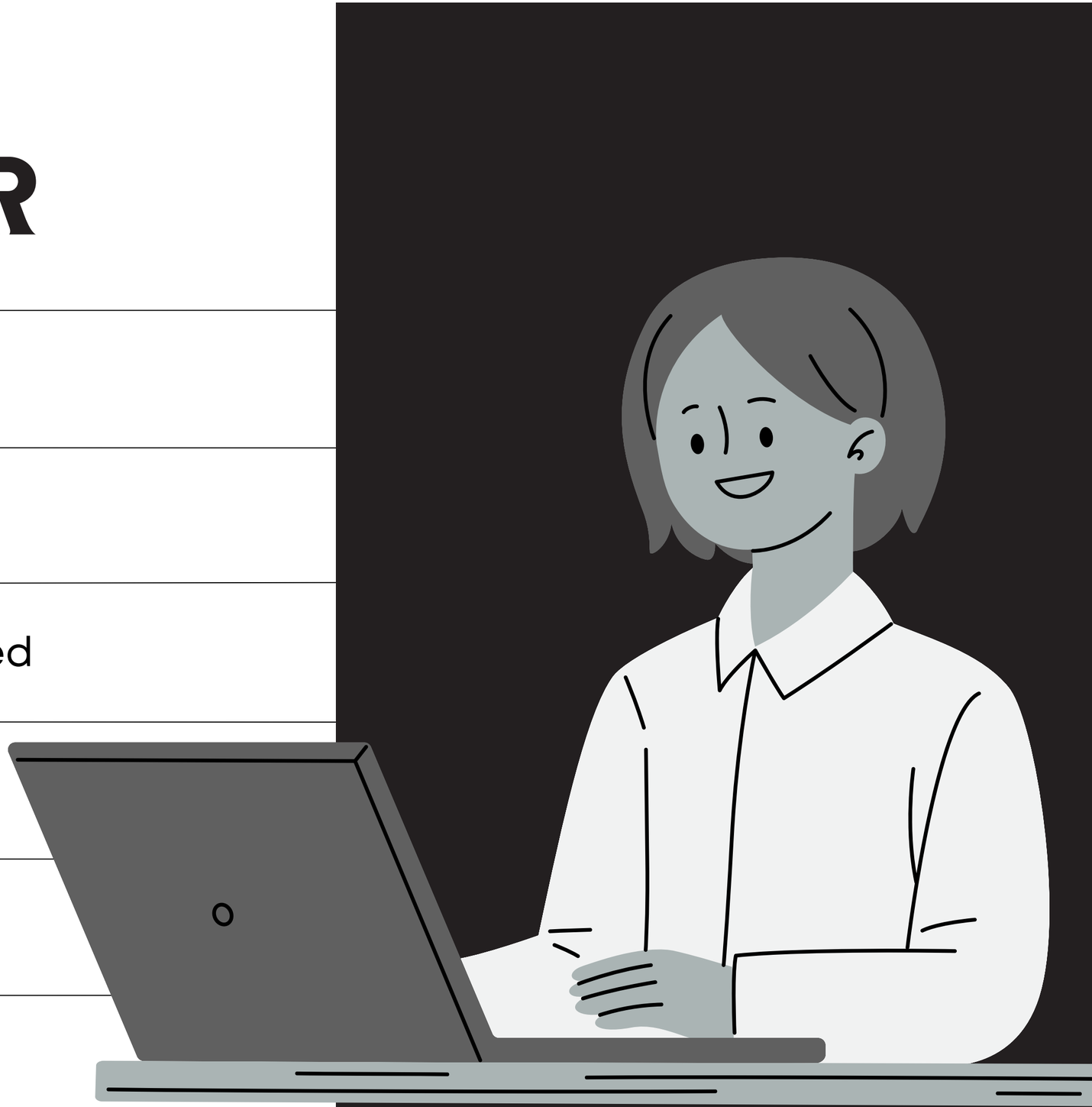
Currencies and Foreign Exchange

Cost of International Education

Cost of International Education: Comparative Financial Dataset for Global Study

Key Tools in MLR

1. ANOVA
2. T-tests
3. R-Squared/Adjusted R-squared
4. P-values
5. Multicollinearity Check (VIF)



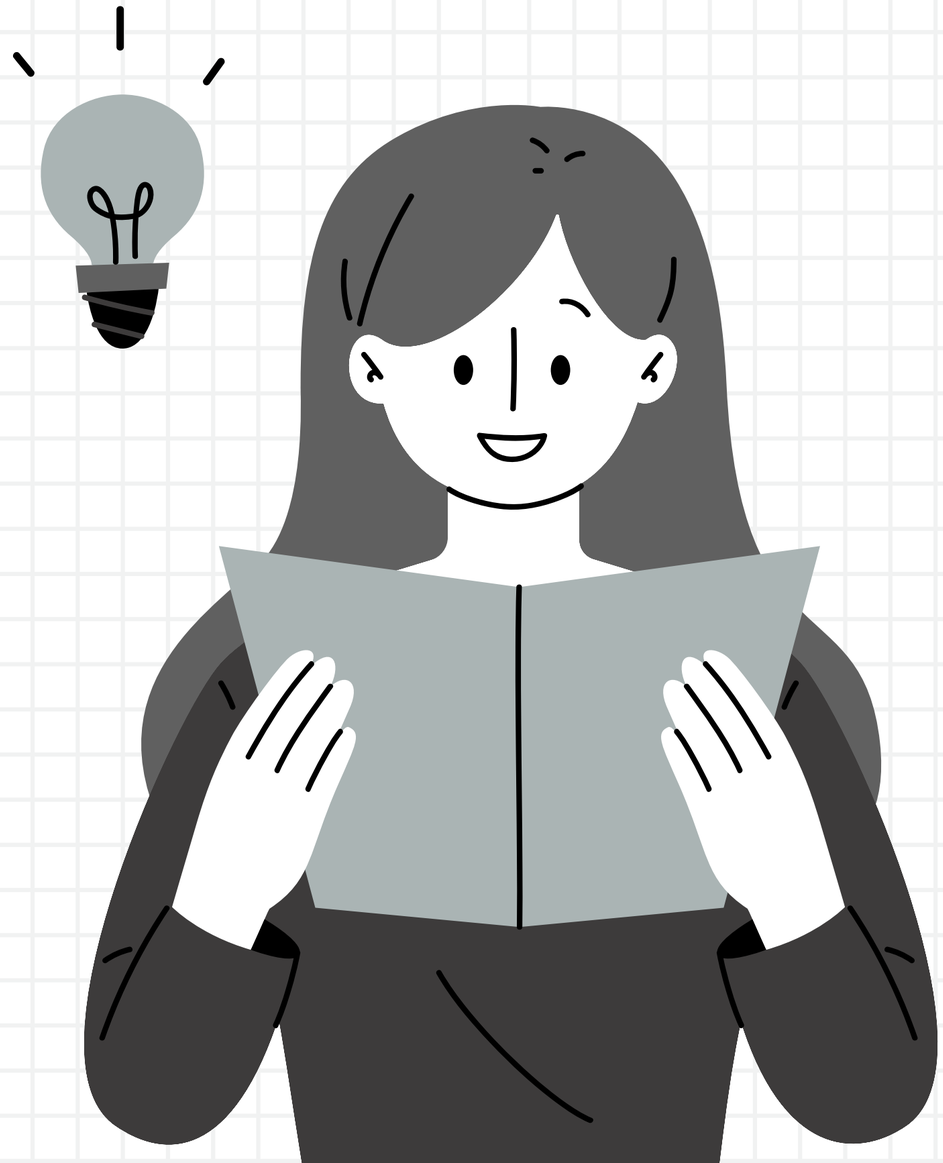
Literature Review

Key Studies on Cost of Foreign Education

1. Wiley Study (2025)
2. IAS Services Report (2025)
3. HEPI Analysis (2023)
4. NACE Journal (2021)
5. EconomiX Working Paper (2017)
6. Taylor & Francis Study (2023)

Key Findings

- Tuition fees inversely impact mobility: Italy saw reduced enrollment with fee hikes, mitigated by education quality.
- US international student enrollment dropped 10% (2015–2019) due to rising costs and limited financial aid.
- Living costs for international students: £900–£1,400/month in the UK, exacerbating financial stress.
- US tuition for international students rose $5,000 (2012–2016) vs. $450 for domestic peers.
- Experiential learning (e.g., UK MBA programs) improved employability for 95% of Indian subcontinent students.
- Host capacity, education ROI, and local costs are key determinants of student destination choices.

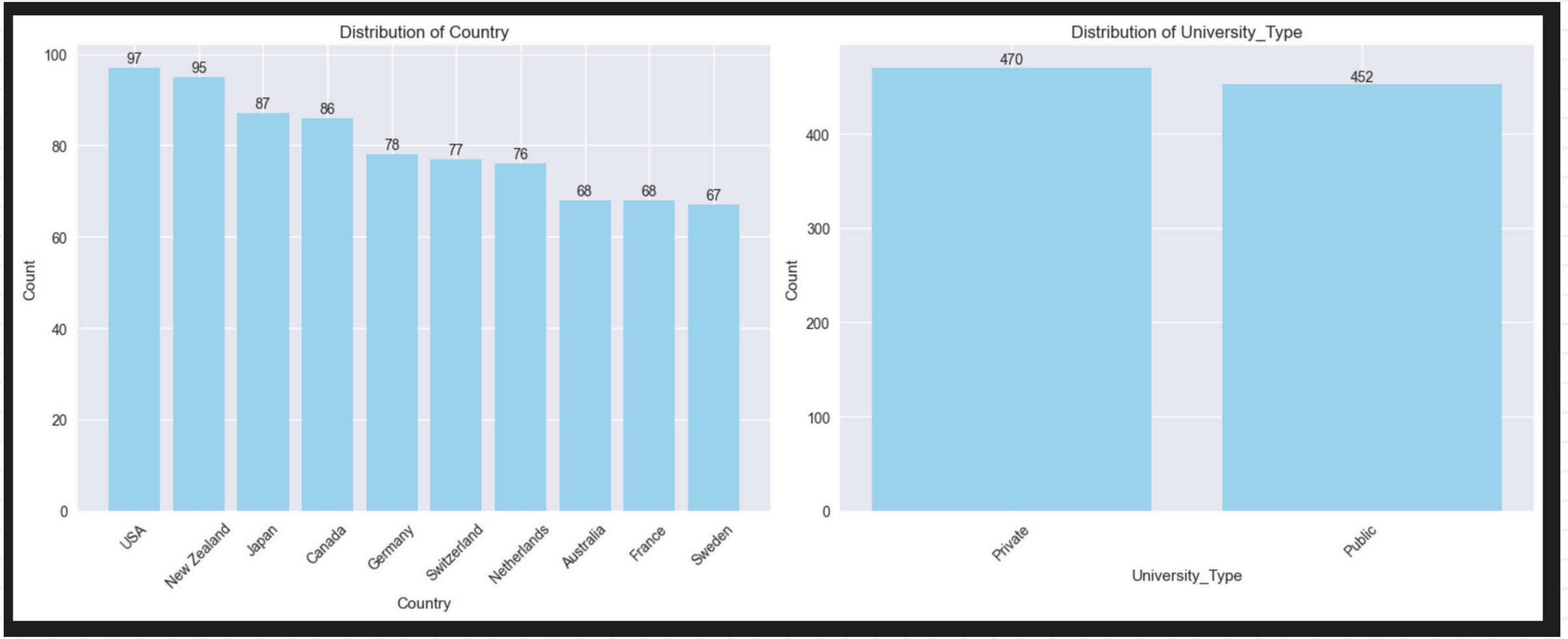


Progress Update

1. **Data Loading and Visualization**

Demo:
https://app.powerbi.com/groups/me/reports/f8ab6b93-ca73-46fb-bc07-20344e37a439/bc1aeb41c6d6e03e8d30?experience=power-bi

2. **Exploratory data analysis**



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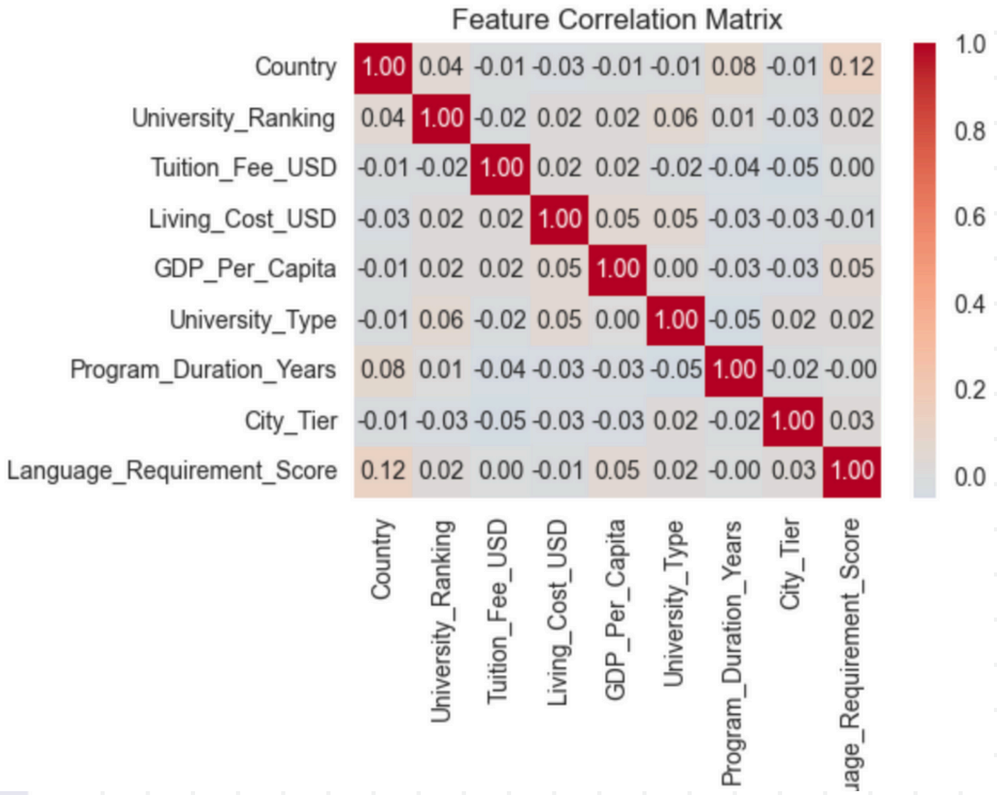
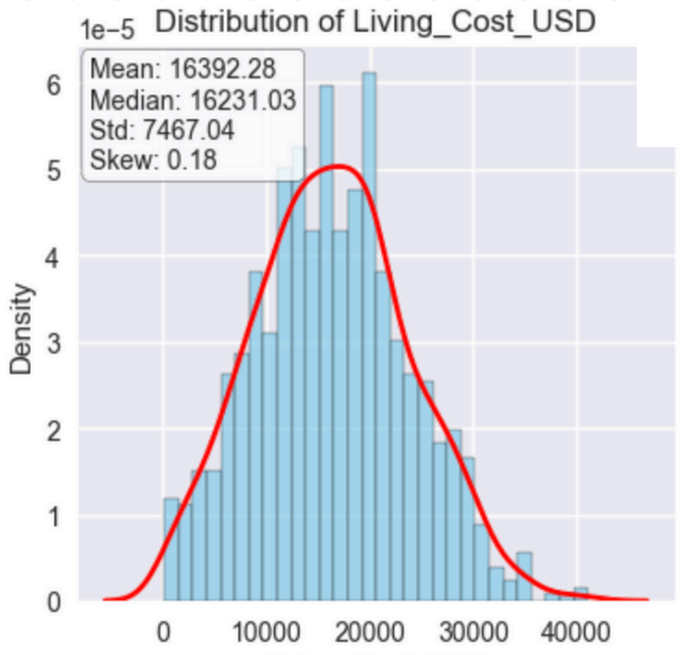
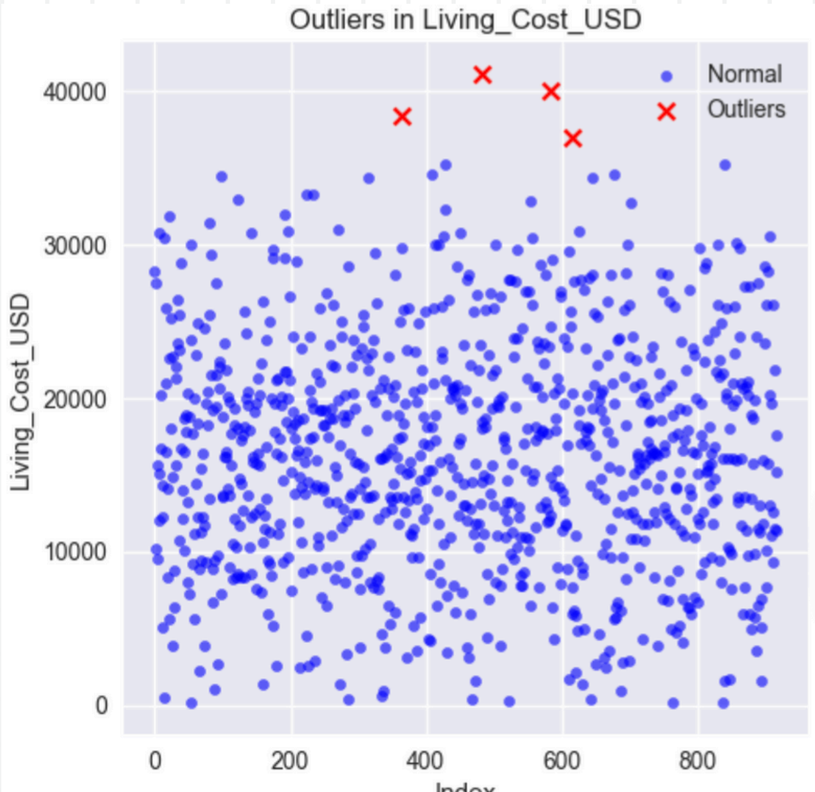
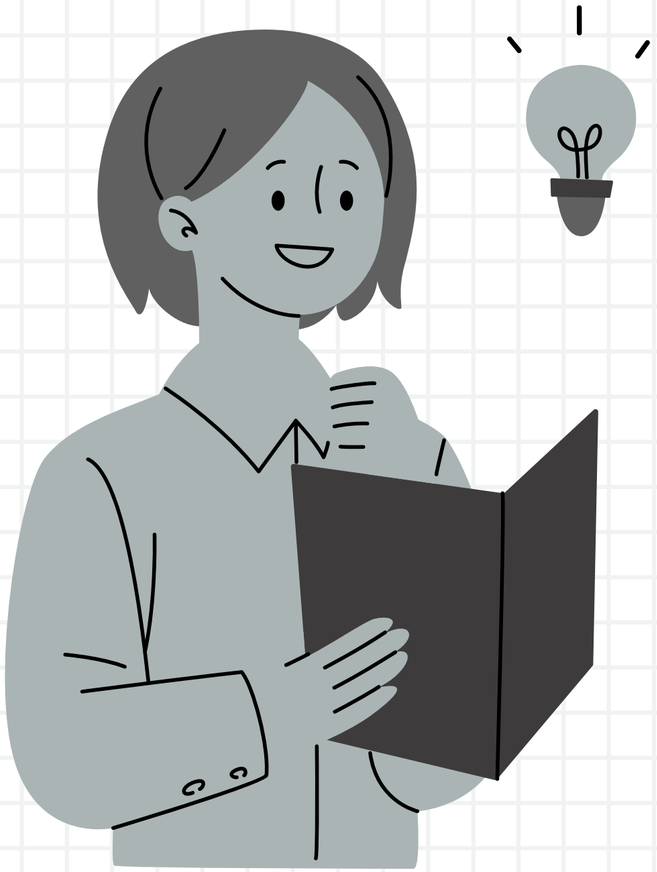






Progress Update

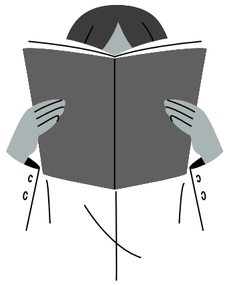


3. MODEL SELECTION RATIONALE

APPROACH: Multiple Linear Regression (OLS)

Why OLS is appropriate for this analysis:

1. Linear Relationship: Education costs typically have linear relationships with features
2. *Interpretability:* Coefficients directly show impact of each feature
3. Statistical Inference: P-values and confidence intervals for significance testing
4. Assumptions: Can be tested and validated



Thank You!