



MAKERERE UNIVERSITY

COLLEGE OF COMPUTING AND INFORMATION SCIENCES
SCHOOL OF COMPUTING AND INFORMATICS TECHNOLOGY

AI-POWERED PRICE INTELLIGENCE FOR CAR BUYERS IN UGANDA

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1.0 PROJECT TITLE

AI-Powered Price Intelligence for Car Buyers in Uganda

2.0 SCOPE

This project predicts second-hand car prices in Uganda, classifies cars into “fairly priced” vs “overpriced” categories, highlights potential pricing biases, and recommends the best value cars based on user budget and preferences.

3.0 PROBLEM BEING SOLVED

Buying or selling second hand cars in Uganda can be a bit of a challenge. Prices are all either over or under depending on the car's make, age, mileage, fuel type, and even where you're buying or selling it. The problem is, most people don't really have good information to trust, so it's easy to either overpay or undersell without realizing it. Some cars are regularly priced too high or too low, and that often goes unnoticed which means people end up unhappy or miss out on better deals. This project aims to address these challenges by providing accurate price predictions, identifying potential biases in pricing, and recommending cars that offer the best value for money based on a user's budget and preferences.

4.0 HOW IT WILL BE IMPLEMENTED

The project will start by gathering car data from Ugandan sites like Jiji, Autorec, and BeForward using scraping tools including prices, brands, mileage, fuel type, and location. I'll train and compare different machine learning models like Linear Regression, Random Forest, and XGBoost, and possibly try neural networks for more complex patterns. I'll also check for pricing bias to see if some car types are regularly over or undervalued. In the end, users will be able to enter their budget and preferences to get smart car recommendations through a simple, easy-to-use interface.

5.0 SIGNIFICANCE

This project will help buyers in Uganda make smarter, more informed decisions when purchasing second-hand cars. By providing accurate price predictions, classifying cars into “fairly priced” vs “overpriced” categories, highlighting potential biases, and recommending cars that offer the best value for their budget and preferences, buyers can confidently identify fair deals and avoid overpaying. Overall, the system promotes trust in the car market, giving buyers the insights they need to make confident choices.