

# Should you RENT or BUY?



**Introduction** Current real estate tools lack crucial property specifics and demographic nuances, oversimplifying decisions. Despite machine learning advancements, challenges like data leakage and market complexity persist. Our advanced valuation system addresses gaps in existing tools, offering comprehensive analysis amid limited properties from increased private equity purchases. It aids users and agents by providing data-driven guidance to navigate the competitive real estate market.

**Our Approaches** We merged property data categorization by bedroom counts and zip codes with macroeconomic statistics. Featurewiz with SULOV and Recursive XGBoost efficiently selects vital features for model training. Our hybrid models, merging grid search with established machine learning algorithms, ensure a strong predictive base. The Tableau dashboard simplifies complex data into user-friendly visuals for navigation. Leveraging diverse data sources and advanced methods, our approach aims to boost predictive accuracy, addressing real estate analytics challenges.

