School of Computer Science & Engineering California State University, San Bernardino
Proposal for CSE 6940 (Graduate Research Methods in Computer Science)
By: Nikitha Kondreddy Venkatramireddy
Advisor: Dr. Khalil Dajani
Date: May 13, 2024

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1. Description:

The proposal aims to develop a House Price Prediction model using Machine Learning (ML) techniques. This project seeks to predict house prices based on various features such as area size, location, number of rooms, etc. Leveraging ML algorithms and techniques, the model will analyze historical housing data to provide accurate predictions for potential buyers, sellers, and real estate investors.

2. Rationale:

The proposal addresses the increasing demand for accurate house price predictions in the real estate market. Predicting house prices accurately is crucial for buyers to make informed decisions, sellers to set competitive prices, and investors to identify lucrative investment opportunities. By utilizing ML techniques, the project aims to automate the process of house price prediction, thereby improving efficiency and accuracy in the real estate industry. Python will be the primary programming language, ensuring accessibility and ease of implementation for stakeholders.

3. Preparation:

Prerequisites for this study include a strong foundation in computer science with coursework in machine learning and data analysis. Proficiency in Python programming and familiarity with ML algorithms is essential. Additionally, proficiency in conducting research, hands-on experience in

similar projects, and a commitment to continuous learning are crucial qualities for success in this area of study.

4. Activity / Outcome Schedule:

Activity	Schedule
Review literature on ML techniques for house price prediction, data preprocessing, and feature engineering.	1-3 weeks
Collect and preprocess historical housing data, including features such as area size, location, number of rooms, etc.	4-6 weeks
Implementation of ML algorithms for house price prediction, including model training and evaluation.	7-14 weeks