

## Predictive Models for Monetary Asset Price Evaluation: A Comparative Review

JR Senadheera<sup>1#</sup>, MKP Madushanka<sup>1</sup> and HRWP Gunathilake<sup>1</sup>

<sup>1</sup>Faculty of Computing, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

<sup>#</sup>37-cs-5972@kdu.ac.lk

### Abstract

This review focuses on analyzing and evaluating predictive techniques for asset price forecasting, centering attention on gold, real estate, and automobile markets. The paper explores numerous algorithms, techniques, methods, and models utilized in foreseeing the values of these assets. A thorough appraisal is conducted that presents various procedures for forecasting the value of assets. This exploration compares the pros, cons, and performance metrics of the anticipating models applied in each discipline. Remarkable attention is granted to the forecasting ability of Convolutional Neural Networks, Fuzzy Rule-based Systems, Deep Learning techniques, Ensemble Regression Models, and other Machine Learning algorithms. Moreover, the tasks of data analysis, preprocessing, and feature selection methods in boosting prediction accuracy are investigated. This review paper calls attention to the implications along with applications of error-free asset value forecasting, together with knowledge-based decision-making, risk mitigation in addition to investment strategies. Moreover, it examines the challenges and limitations along with future directions in the domain, highlighting the demand for robust, compliant, and interpretable forecasting models. By assessing and differentiating the approaches and outcomes of asset value prediction across contrasting fields, this review delivers important insights appropriate to researchers, professionals, and decision-makers concerned with the dynamics and predictive potentials of these platforms.

**Keywords:** *Monetary asset price evaluation, Gold price prediction, Real estate price prediction, Automobile price prediction*