Employee Salary Prediction Using Machine Learning

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Abstract: *This paper presents the design and development of an Employee Salary Prediction System using Machine Learning techniques. The system is developed in Python and integrates algorithms such as Linear Regression, Random Forest, and XGBoost to accurately estimate employee salaries based on factors like experience, job role, education, and location. The project focuses on data preprocessing, model training, and performance evaluation to identify the most reliable algorithm for salary prediction. The system's graphical interface allows users to input relevant data and receive real-time salary estimations, enhancing decision-making for both employers and employees. By emphasizing predictive accuracy, user interaction, and data-driven insights, this project contributes to the field of intelligent business analytics, demonstrating how machine learning can support fair and transparent compensation planning in organizations.*

Keywords: employee Salary Prediction, Machine Learning, Linear Regression, Random Forest, XGBoost, Predictive Analytics, Data Preprocessing, Feature Engineering, Model Evaluation, Salary Estimation