

# Box Office Revenue Prediction

**Dr G Paavai Anand<sup>1</sup>, Karthick S<sup>2</sup>, Vignesh V<sup>3</sup>, Sarvesh P<sup>4</sup>**

Assistant Professor (SG), Department of CSE<sup>1</sup>

Students, Department of CSE<sup>2,3,4</sup>

SRM Institute of Science and Technology, Vadapalani, Chennai, TN, India

**Abstract:** *This study focuses on predicting box office revenue, an important metric for assessing a film's financial success and informing production and marketing decisions. Utilizing a dataset containing key attributes like budget, genre, cast, director, and release date, linear regression models are applied to estimate revenue outcomes. Model performance is evaluated using metrics such as Mean Absolute Error (MAE) and R-squared, which highlight the viability of linear regression for this predictive task. The study's findings underscore influential factors that drive box office performance and lay groundwork for future enhancements in predictive modeling.*

**Keywords:** Box Office Revenue Prediction, Linear Regression, Machine Learning, Movie Success.