

## Project Overview

machine learning model to predict whether or not an employee will leave the company.

## Key Insights

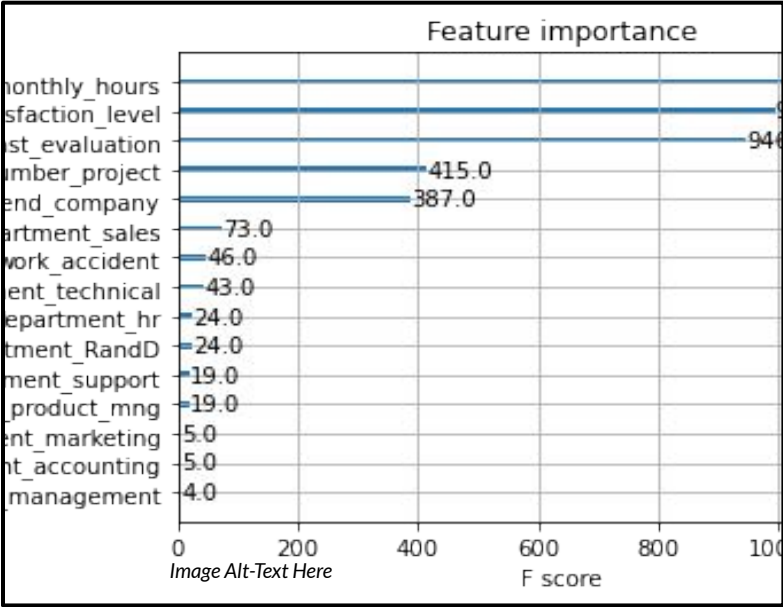
The XGBoost model outperformed the Random Forest model in terms of recall, F1-score, and accuracy on both the validation and test datasets.

The XGBoost model achieved a high recall, indicating that it can effectively identify a significant portion of employees who may leave the company.

Employee satisfaction, evaluation, number of projects, average monthly hours, and time spent in the company are crucial factors influencing employee attrition.

The unbalanced nature of the dataset (approximately 17% churned) may impact model performance. Techniques such as class balancing or different evaluation metrics may be considered.

## Details



## Next Steps

Conduct more extensive hyperparameter tuning for both XGBoost and Random Forest models. Explore additional features or transforming existing ones to capture more complex relationships. Experiment with different ensemble techniques to combine the strengths of multiple models.