

Build a predictive model for employee attrition



Insights:

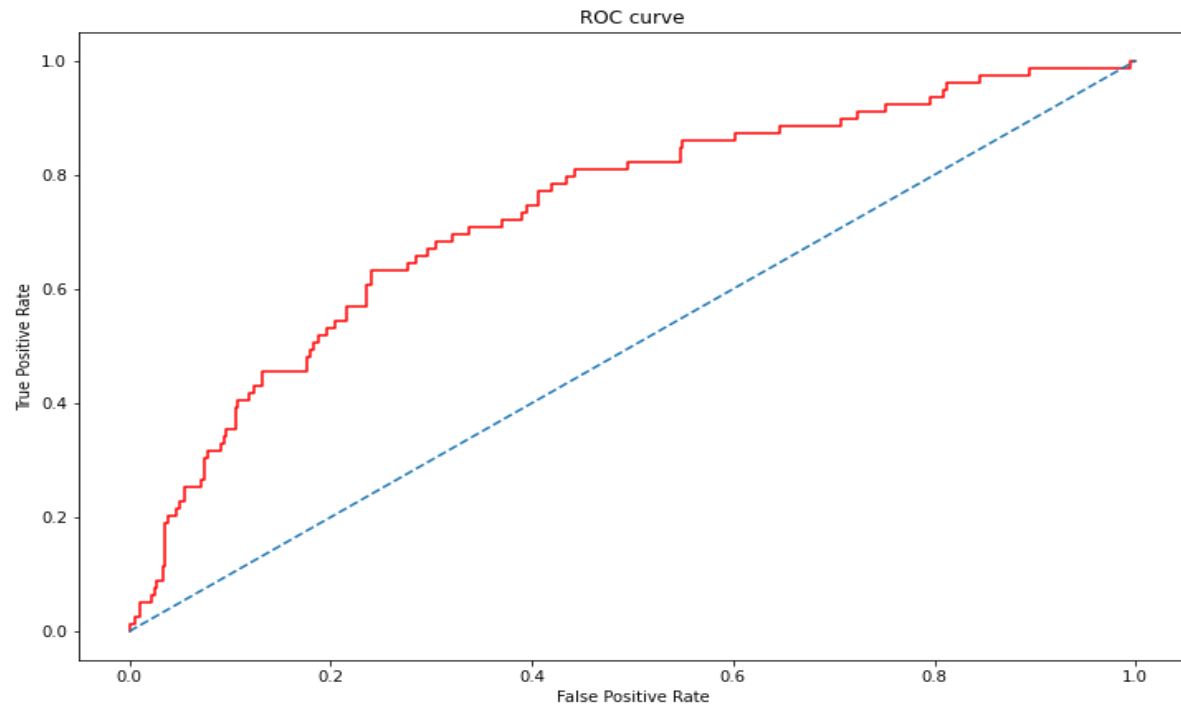
In this project we build three ML models to predict employee attrition name as Logistic Regression, Decision Tree and Random Forest. And also we perform ROC curve (receiver operating characteristic curve) is a graph showing the performance of a classification model at all classification thresholds. for this ML models.

- ❑ The accuracy score of Logistic Regression model is 82.08 percentage
- ❑ The accuracy score of Decision Tree model is 84.58 percentage
- ❑ The accuracy score of Random Forest model is 86.16 percentage

ROC curve for ML models:

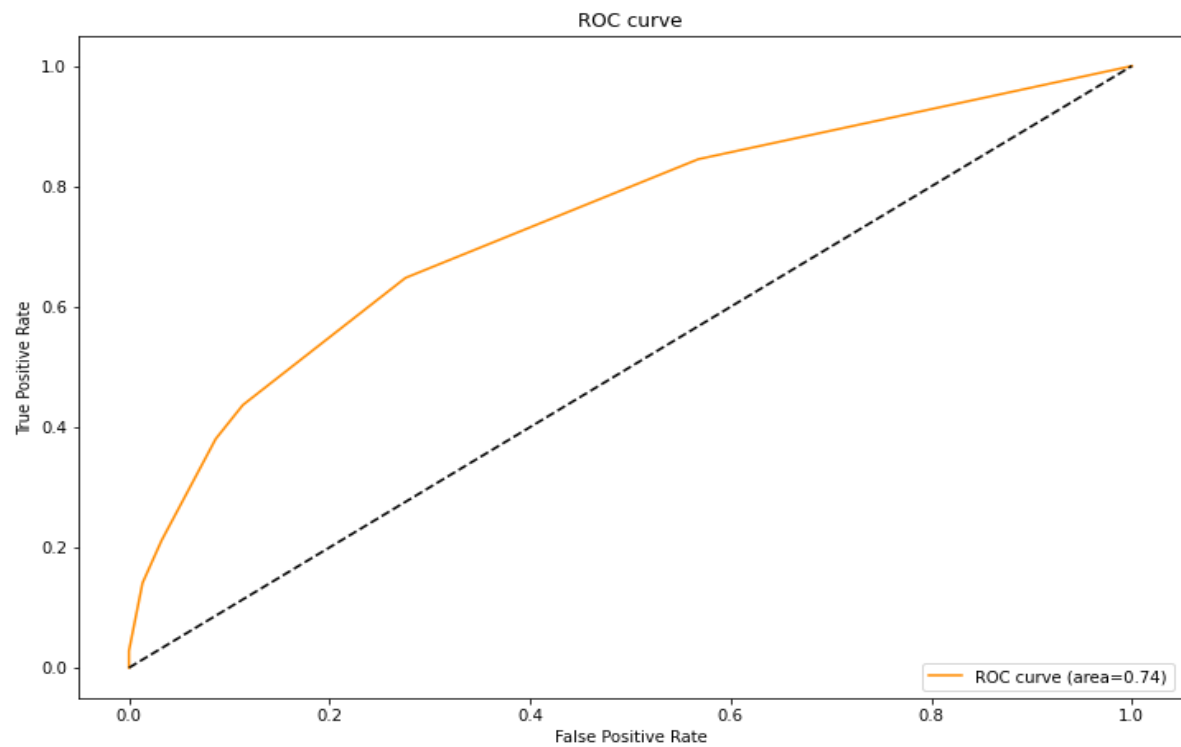
Logestic Regression:

- ❑ The area under curve for the Logistic regression is 0.71



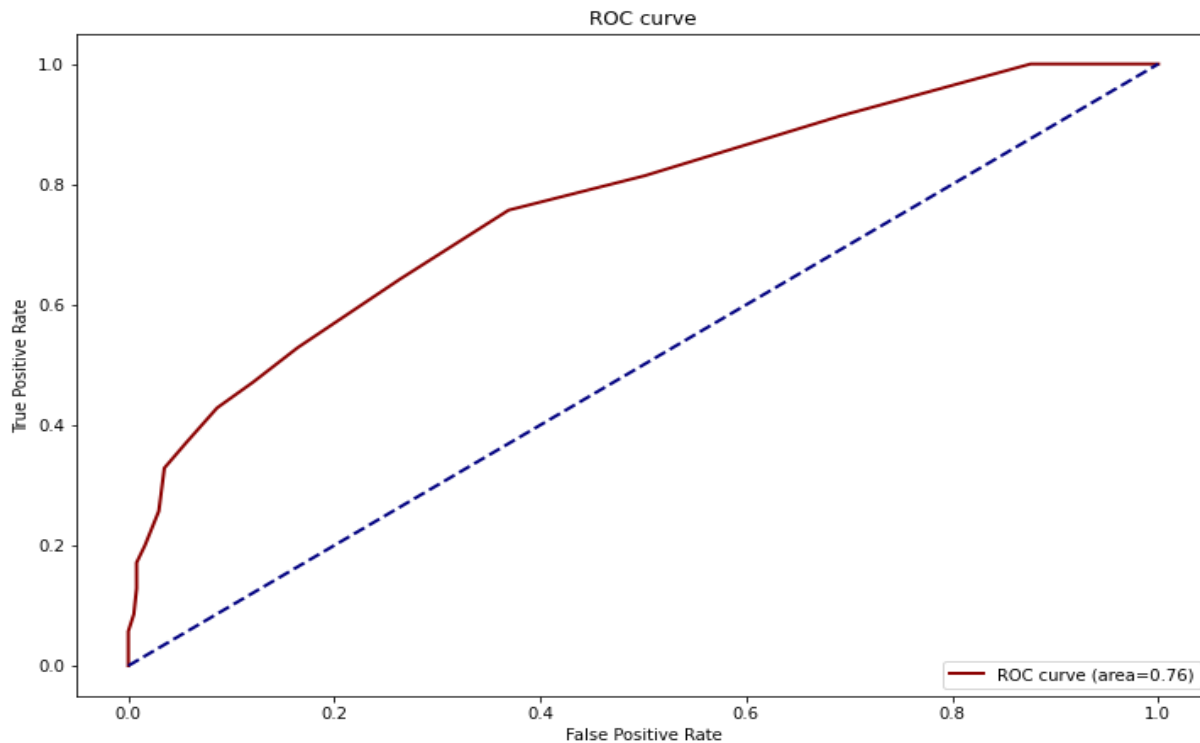
Decision Tree:

- ❑ The area under curve for the Decision Tree is 0.74



Random Forest:

- ❑ The area under curve for the Random Forest is 0.76



Conclusion:

- From the above information, it seems that the Random forest has a highest accuracy percentage (86.16) than the other two model,
- Also (AUC=0.76) area under curve value is greater than the other two model
- Based on the higher percentage value and Area under curve ,we conclude the Random Forest is the best model.

In []: