

# Salifort Motors

## Employee Retention Project

### ISSUE / PROBLEM

Salifort Motors seeks to improve employee retention and answer the following question:

**What's likely to make the employee leave the company?**

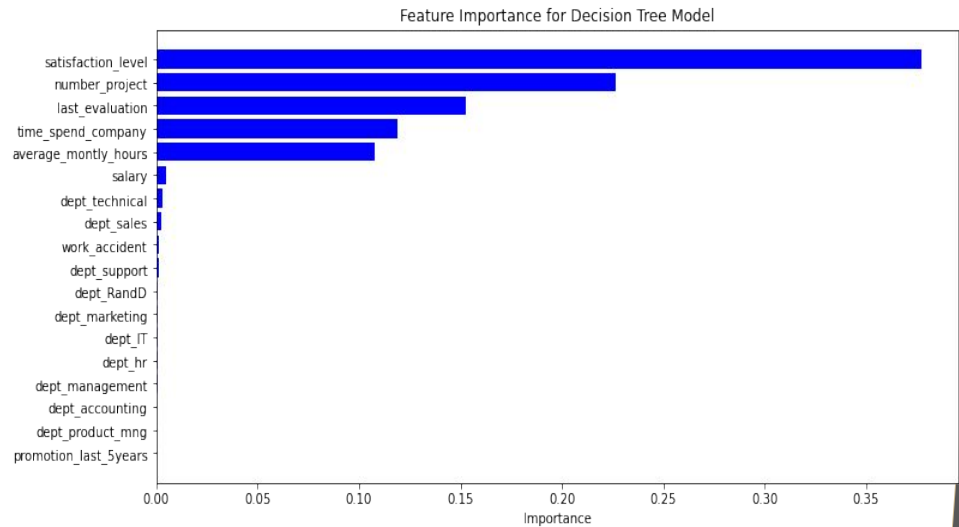
### RESPONSE

Apply various classification models.

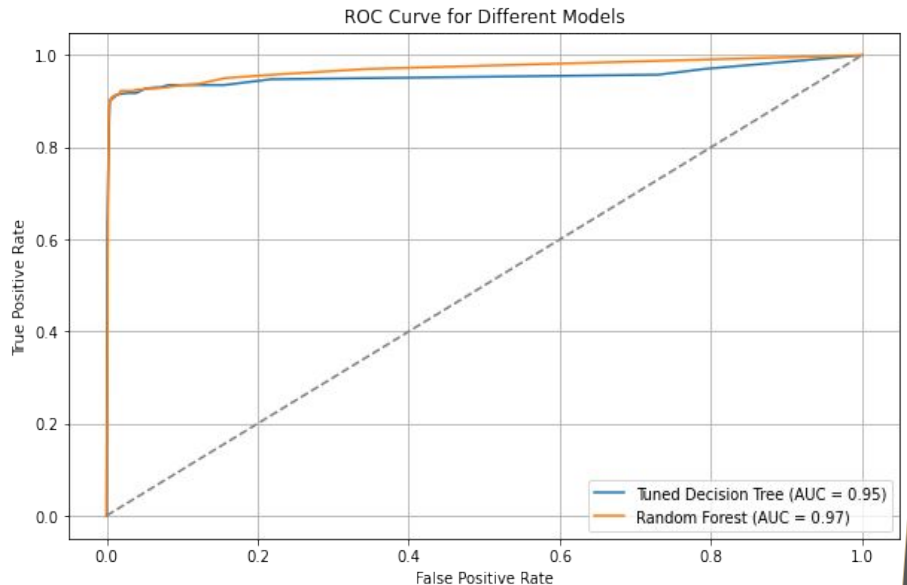
The random forest model performs best amongst LogReg and Decision Tree.

### IMPACT

This model helps predict whether an employee will leave and identify which factors are most influential. These insights can help HR make decisions to improve employee retention.



Barplot above shows the most relevant variables: *Satisfaction level*, *'number\_project'*, *'last eval'* and *'time spend'*.



The above line graph shows a comparison in the ROC-AUC scores between the DT model and the RF model. This is a visual representation on how the RF model outperforms the runner up.

### INSIGHTS/NEXT STEPS

- Cap the number of projects that employees can work on.
- Consider promoting employees who have been with the company for at least four years, or conduct further investigation about why four-year tenured employees are so dissatisfied.
- Either reward employees for working longer hours, or don't require them to do so.
- If employees aren't familiar with the company's overtime pay policies, inform them about this. If the expectations around workload and time off aren't explicit, make them clear.
- Hold company-wide and within-team discussions to understand and address the company work culture, across the board and in specific contexts.
- High evaluation scores should not be reserved for employees who work 200+ hours per month. Consider a proportionate scale for rewarding employees who contribute more/put in more effort.