

Salifort Motors Employee Turnover Analysis Project

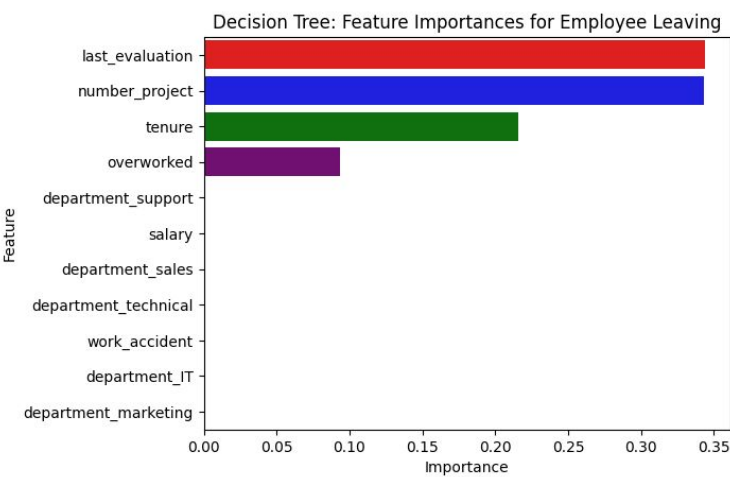
Google Advanced Data Analytics Capstone Project

Overview

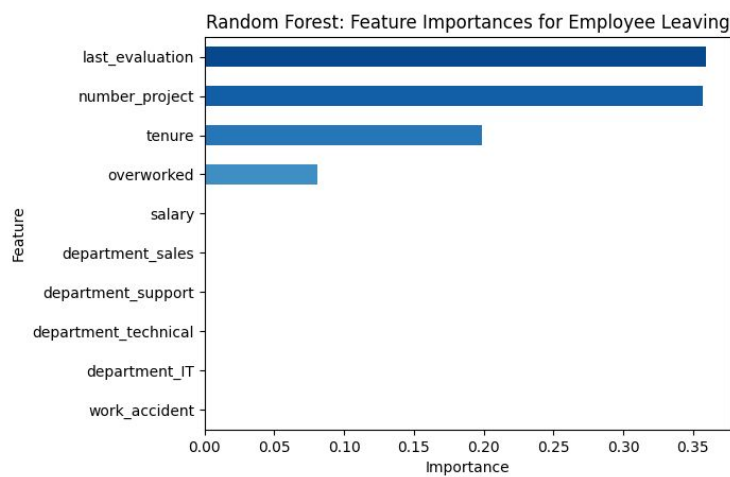
Salifort Motors is facing a high rate of employee turnover. They want a data professional to analyze employee survey data and brainstorm ideas for how to increase employee retention.

Objective

Build either a statistical model (logistic regression) or a machine learning model (decision tree, random forest, etc.) to evaluate what key factors are driving employee turnover. After building and evaluating an effective model, share recommended next steps with the leadership team.



Barplot illustrating the most relevant variables that drive employees to leave



Barplot indicating which variables have the highest importance in the random forest model

Note: In both models, the variables most helpful in predicting the outcome variable left are **last_evaluation**, **number_project**, **tenure**, and **overworked**, sorted from highest to lowest importance

Next Steps

- Cut back on employee hours or reward employees who work longer hours.
- Don't assign so many projects to employees.
- Consider promoting employees who have stuck with the company for four years.
- Better inform incoming and current employees about Salifort Motors' overtime pay policies. Make the expectations of workload and time off very specific and clear to the employees.
- Have internal discussions (both department-wise and company-wide) to change company work culture as needed, both across the entire company and in specific contexts.
- Change the evaluation score system so that high evaluation scores aren't reserved for employees who work 200+ hours monthly. Consider implementing a proportionate scale for rewarding employees who contribute more/put in more effort, even if they aren't putting in the extremely long hours.