Project proposal

Employee Retention Project

Overview

Salifort Motors is a fictional French-based alternative energy vehicle manufacturer with over 100,000 employees worldwide. Its senior leadership has asked the data team to analyze the survey data collected by the HR department and provide recommendations for how to increase employee retention. In addition, the goal is to build a machine learning model based on the survey data that predicts whether an employee will leave the company. A successful outcome will help the company to increase retention and job satisfaction for current employees, and save money and time in recruiting and training new employees.

Milestone	Tasks, Deliverables, Estimated time	PACE stage
1	• Understand the business scenario and problem. • Obtain the survey data and familiarize yourself with its variables. • Identify software and hardware needs. • Outline project workflow. **Deliverables:** project proposal, HR dataset • **Estimated time:** 0.5 days	Plan
2	• Perform exploratory data analysis, including data exploration, cleaning, and visualization. • Consider modeling strategies and check model assumptions. • Prepare the dataset for modeling. **Deliverables:** key insights, visualizations • **Estimated time:** 2 days	Analyze
3	• Implement feature engineering, including feature selection, transformation, and extraction. • Finalize modeling strategies. • Build machine learning models and pipelines, including hyperparameter tuning. • Carry out a preliminary evaluation of the models using cross-validation. **Deliverables:** initial results, machine learning models • **Estimated time:** 1-2 days	Construct
4	• Compare the performance of the tuned models. • Conduct a thorough evaluation of the champion model. • Share findings with stakeholders, including results, visualizations, and recommendations. **Deliverables:** executive summary, champion model • **Estimated time:** 1-2 days	Execute