# Salifort Motor

### **Employee Retention Project**

#### **Overview**

Salifort Motor is example capstone project company who make overview for maintaining employee and support them to upskill, professional development and success.

#### **Problem**

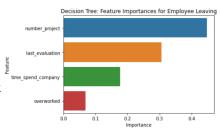
Employees in Salifort Motor is a high rate of turnover by Salifort's senior leadership team is concerned about how many employees are leaving the company. Further, the high turnover rate is costly in the financial sense. Salifort makes a big investment in recruiting, training, and upskilling its employees.

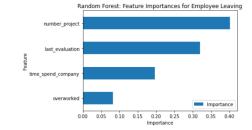
#### Solution

We are creation predict model who left or stay employee in company for defining insight from important attributes in data sources that make decision guide for maintaining employees in company.

#### **Details**

- From insight, left employee has number projects over 6 projects with high evaluation That mean it very uncomfortable to hard work and over time they must work over 300 hours per month from normally 166.67 hours per month so their satisfied score is low.





Training and Validation Accuracy

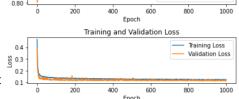
Training Accuracy

Validation Accuracy

0.95

0.85

- From insight, left some employee has number projects is 2 projects with low evaluation. That mean it no enough to working in company and lower work on time than 166.67 hours per month so their satisfied score is low too.
- From we choosing selected data from insight. We summarize with experiment figures from class prediction in decision tree, random forest with XGboost and neural network model. By overall all model has predict more efficiency class by random forest is best model to selector.
- I found interesting employee data when he leave from company by their important data is number project, last evaluation, tenure and employee has overworking than 9 hour per days from insight from over 65% of employees.



- From why employee quit from company that mean not include satisfaction score. highest important columns is number project that obviously because if worker has more than 7 projects they must exits because make they overworking, second columns is last evaluation because when employee get score higher in hard work may cause they quit from their jobs, third column is tenure if they alive more than 4 year - 5 year they must overwork and really quits from jobs, and overwork to lastly in over respectively for all tree base model like decision tree model and random forest model.

## **Next Steps**

- HR need to controlled number project for employee working must on cap like no more than 6 projects per employees.
- HR need to recruit new employee, train with upskill and development for support their recent work so reduce their time and cost to use and evaluation with fair score point not bias with lower projects number with lower score and high projects number with high score included protect satisfaction of each employees and reduce their overwork.