

Predicting qualified employees for promotion using Classification model

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Introduction:

The third project of the T5 data science bootcamp focuses on creating a supervised machine learning classification model. Therefore, the idea we are proposing is using HR data in order to predict the qualified employee for promotion every year.

- **Company information:** The data we are using belong to a multinational corporation that consists of many sectors across the company.
- **Problem statement:** Knowing the eligible employee for promotion in every sector is very important for any company. The larger the company the more time and effort it takes in order to specify the qualified employees for promotion. Therefore, this project will suggest a machine learning classification model that predicts the qualified employee for promotion.
- **Value for the company:** Creating a model that predicts the promotion of possible candidates in a company is very useful. It saves time of employees as well as expedites the process of promoting employees and moving processes of employees to new positions.

Dataset: The data that will be used in this project is downloaded from Kaggle.com (<https://www.kaggle.com/arashnic/hr-ana>). The data is HR analytics data based on a multinational corporation with many departments. The dataset consists of over 20000 observations with 12 features.

Tools:

Technologies: Python, Jupyter Notebook.

Libraries: Pandas, NumPy, Seaborn, Matplot, and sklearn.