



Predicting Job Stability Using Classification

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Introduction:

The third project of the Data Science Bootcamp T5 is called Predicting Job Stability Using Classification. Through the project, we will establish employee stability for SDAIA authority. Hence, this project aims to find the best ML models to predict employee stability based on many features. In addition, this project sheds light on the dataset that we will use, dataset description, and finally, the tools used in this project.

- Company information: SDAIA's transformation strategy was approved in 2019. The strategy gives SDAIA a
 core mandate to drive and own the national data and AI plan to help achieve Vision 2030's goals and our
 Kingdom's highest potential.
- **Problem statement:** Prediction job stability for a data scientist is essential because employees prefer stable jobs, meaning they want a job with steady pay and benefits.
- Value for the company: Due to the importance of job stability, it saves the efforts of the HR department and does not lose their proficient employees.

Dataset:

The datasets that will be used in this project is a public source from Kaggle. Source: <u>Here</u>. The dataset includes many features it consists of *relevent_experience*, *company_size*, *training_hours*, *education_level*, *etc*. It will be useful for the classification prediction.

• Size: 19159 records \times 14 columns

Tools:

- **Technologies:** Jupyter Notebook, Python.
- Libraries: Pandas, NumPy, Matplotlib, Seaborn, and Scikit-learn.