

Data Engineer Challenge

Your challenge is: “Create a Machine Learning Service”

You can use any framework you feel comfortable with.

Use the dataset given named *HR_Employee_Attrition* to build your application.

Step 1. Use the HR dataset to create a service that generates recommendations to our HR department. These recommendations are generated by a ML model that is given in a pickle format. The model generates a recommendation about the possible turnover of a collaborator via a ‘turnover score’.

- Suppose the Data Scientist of your team gives you the original data, the model and a simple jupyter notebook that shows you how to generate the model and how to generate the dataset with a new output column called ‘turnover score’.
- The notebook also shows how to use the model to generate a response recommendation, but perhaps not exactly in the way you need it.
 - You have to figure out how to use this information.
- The Data Scientist forgot to give you the rest of the documentation...
- Your task is to build a service that receives 2 methods:

- i. To retrieve the resulting recommendation for a given record corresponding to the data of a collaborator using the ID. For this you have to build a database with the dataset that contains the scoring for each collaborator.
- ii. To generate a recommendation for a new collaborator.
 - o The output of the model is a real number stored in 'turnover score', can you help us to make the recommendation more simple to read by our HR partner?

You may build the service in any way you want, in the framework of your choice and with the components that you see fit. All of your choices count. Add tests to your code.

Step 2. Submit your project to a github repo and make sure we can reproduce it. Notify the recruiter of your submission before the deadline and send the link.

Step 3. Optional: Package your App using Docker and Compose.