Machine Learning Engineer Assessment

Dear Candidate,

Thank you for applying to the position of Machine Learning Engineer at nPlan. We are thrilled to learn more about what you can do, and hope you will impress us with your ML engineering skills. We would appreciate it if you could complete the following task using Python 3.5 or above. Your code should be of production quality.

Using the dataset sent as attachment, implement answers to the following questions.

1. Implement a function that summarises the data and highlights any characteristics you find interesting.
2. Decide on a language model to use to embed the "features" field in the data.
3. Choose a target from those provided in the data and implement a script that trains, evaluates and saves a Deep Learning model.
4. Implement a script that loads an evaluation set (in the same format as the data provided) and your model and produces a performance report. This will be used to evaluate your submission in an evaluation set (not provided).
5. (Bonus) Implement a function that gauges the model's certainty about its predictions.

Your submission should include:

1. The scripts that you used to train and test your model.
2. A pre-trained model in the format your script (4) requires.
3. Instructions on how to run your code and any package requirements.

We will use your submission as a topic of conversation during any potential follow-up interview, and you consequently authorise us to use your submission internally for the sole purpose of evaluating your application.

All the best,
The nPlan team