

Assignment Description

Data Preprocessing

- After checking the data I got, I do some actions at this.
 - At beginning, I thought the data size is small at beginning to have well predict.
 - For missing, I tried to use “changing ? Into 0” and “deleting them” these two actions.
 - And finally I decided to use “deleting”
 - Besides, I did the normalizing to these data. I divided these data by 10.
 - Use 70% as training data, 30% as testing data
- Creating the model
 - I try to use naive-bayes to build the model to predict the everything first to check the data. (“naive_bayes_checking” file)
 - Why did I use naive-bayes? Because naive-bayes is a basic classifier to understand the situation of data.
 - The accuracy is almost 98%, not sure if it is too high yet. Maybe we don't need so many attributes.
 - Using the neural network to predict (“neural_network_checking.ipynb” file)
 - Why did I use neural network? I hope it can deal with the problem I mentioned before.
 - learning_rate = 0.001
 - dropout = 0.65
 - The accuracy is almost 99%
- Saving the model in the “model” file.
- Build the API and use Django to build
 - Api is in the “api.py” file
 - Web pages are in the “page” file
 - <http://127.0.0.1:8000/>
 - Please download the Django environment first.