

Assignment 4.2: TENSORFLOW

Submit file PDF: [assign4.2_lớp.nhóm_tênho.pdf](#)

For example: [assign4.2_02clc.03_quetd.pdf](#)

[assign4.2_02cq.03_quetd.pdf](#)

- Submit before **MONDAY (15/09) 11:30PM** for both CQ & CLC classes
//same as assignment3

SINH VIÊN CODE VÀ VIẾT GIẢI THÍCH CODE CHI TIẾT

Improve 4.1

4.2. Extend Assignment 4.1

- Build a dataset with **10.000 persons and 20 features** (jobs, age, gender, height, weight....) and store in C:\DATA\data_4.2.csv
- Show the distribution of the dataset
- Using 5 basic ML models and using BMI to classifying and predicting
- Build models CNN, RNN, LSTM with ≥ 5 layers for classification and prediction problem in overweight, underweight, normal with respect to *age, job, gender, area, diet*
- Compare and evaluate models given with metrics accuracy, MAE, MSE, RMSE
- Visualize the results:
 - Which age has more overweight persons?
 - Which job has more overweight persons?
 - Which gender has more overweight persons?
 - Which area has more overweight persons?
- Deploy the best model so that user enters features and output is underweight, overweight or normal
- Build a BIG Knowledge base more 3 M and store in C:\DATA\kb_healthGuide.json and give a guide for health based on this knowledge base.
- Build guide with chat based on your knowledge base and prediction result