

Team Assignment – A regression model for happiness score

Due date: 2020_2_23 (Sunday) 11:59pm

Refer to the World Happiness Report dataset:

<https://www.kaggle.com/unsdsn/world-happiness>

Create a regression model for the happiness score using the provided features (family, health, government, generosity, ...)

- 1) Create a linear regression model for the happiness score, record the RMSE of your model.
- 2) Train a multi-layer perceptron model (1 hidden layer) that can perform comparably well as the linear regression model measured by the RMSE.

Required submission files:

- 1) A report of no more than 3 pages in IEEE format (abstract, introduction, method/approach, results, discussions & conclusions, references).
- 2) Report content:
 - Systematic results of your model development by clearly describing model used (including how data is prepared, the number of parameters, and the specific features selected and how...);
 - Including figures to show how well your model fits the given data (you may consider plotting 2 features at a time with the 3rd dimension as the happiness score or you may use other visualization tools);
 - Comparisons of modeling errors when using different features and different number of parameters.
- 3) Your code with a readme so that your TA can run your code to verify your results.

Zip up the above items then upload one file as your individual submission.

File name convention: Team#_Happiness.zip