

Any Boson at Home?

ButterGods

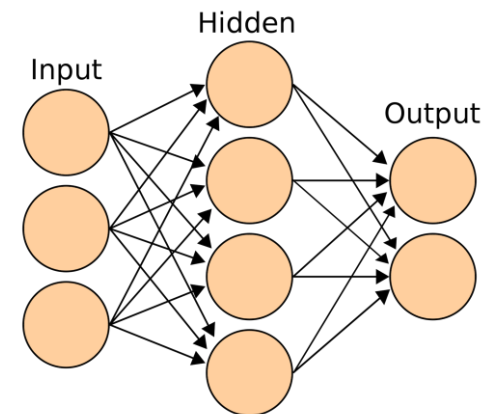
Blai Ras, Pablo Álvarez, David Vilà, Àlex Padrós and Andreu Orós

Data preprocessing

- We normalized all the data
 - StandardScaler()
 - RobustScaler(): takes into account outliers.
- We looked at correlations
 - We removed BUTTER
 - We tried to train removing variables with some correlation

Best model: MLP Classifier

- Grid-Search CV for select hyperparameters
- Multi-Layer Perceptron
 - **Activation:** tanh
 - **Alpha:** 0.001 (L-2 regularization)
 - 5 **hidden layers** of size 100
 - **Early-Stopping:** True, max. 5 iteration with no improvement



Results

- Train AUC Score 0.90588
- Test AUC Score: 0.90691
- Kaggle AUC Score:
 - Public: 0.91572
 - Private **0,91294**

