

Epoch Core Selection Hackathon

AI20BTECH11006

Results

Achieved an accuracy of 80.9 using stacking, 81 using random forest alone.

Preprocessing

I used two kinds of pre-processing, one being PCA which I used for KNN and Logistic Regression. The other being just removing two features (l, m value) which was used for Decision Tree and Random forest. I used this method because it gave me slightly higher accuracy and it doesn't lead to loss in explainability in case of Decision Tree.

Classifiers Used

1. KNN
2. Logistic Regression
3. Decision Tree
4. Random Forest > Further in case of Random forest, since the dataset was too small I ended up using a higher fraction of data and features for each tree

On top of these models, stacking was done to get slightly more stable results.

Find the relevant code for classifiers in `src` directory