

SHAP Interpretability Results:

Hilal started implementing SHAP interpretability on our project dataset (MoA). First, he tried to run it using the RandomForestClassifier, however this process didn't end yet (about 24h of running) and we are still waiting to see the results that it will end up with. We expected it to take this long since we have too many classes to deal with in our problem. In the meantime, he tried to run another model (LinearSVC, OneVsRestClassifier), however, TreeExplainer doesn't support such library. For that reason, he went for another set of libraries. He tried to run xgboost on a machine and gradient boost (MultiOutputClassifier) with k-fold and grid search on another machine, however both didn't end from yesterday. So far, we have 3 running processes for SHAP now:

- The RandomForestClassifier
- The XGBClassifier
- The MultiOutputClassifier = GradientBoostingClassifier

Codes are available in this link: <https://github.com/Hilal37/DataScience>