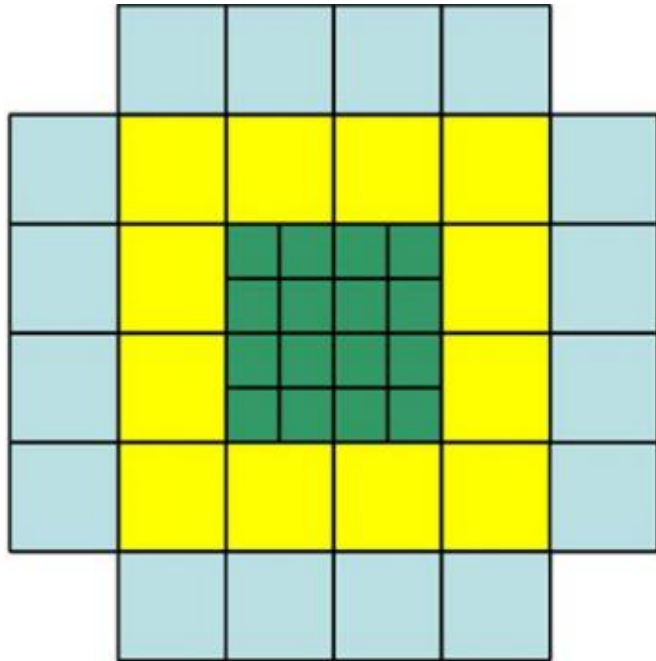


Собрание 26.11

Александр Жаров

Основная информация



Features:

- Modules 1-16, 21-22, 27-28 + EPSD20
- Layers 1-10 + EPSD20

SWAN: PSD/MyThirdClassifier(2).ipynb

SWAN: PSD/MyImbalancedLearningClassifier1.ipynb

SWAN: PSD/MyMLP.ipynb

- AdaBoostClassifier()
- GradientBoostingClassifier(n_estimators=50)
- MLPClassifier(activation='logistic', alpha=0.0001, hidden_layer_sizes=(10, 4), learning_rate='invscaling', solver='lbfgs')
- XGBClassifier(scale_pos_weight=5 / 0.2)

AdaBoostClassifier

modules

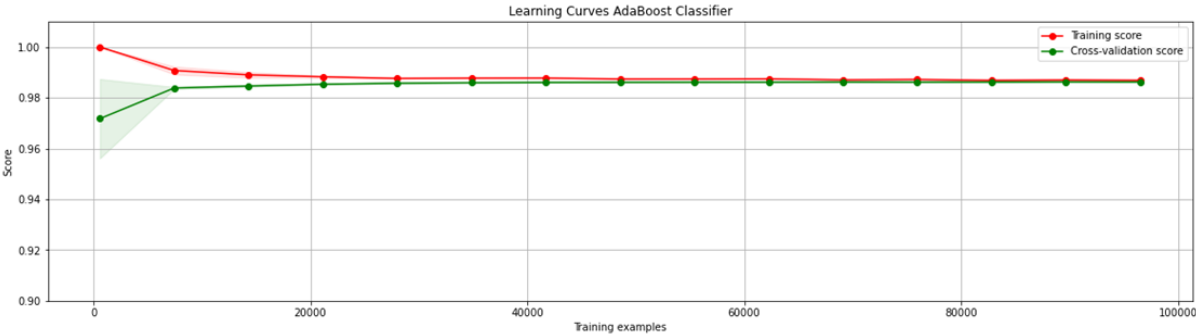
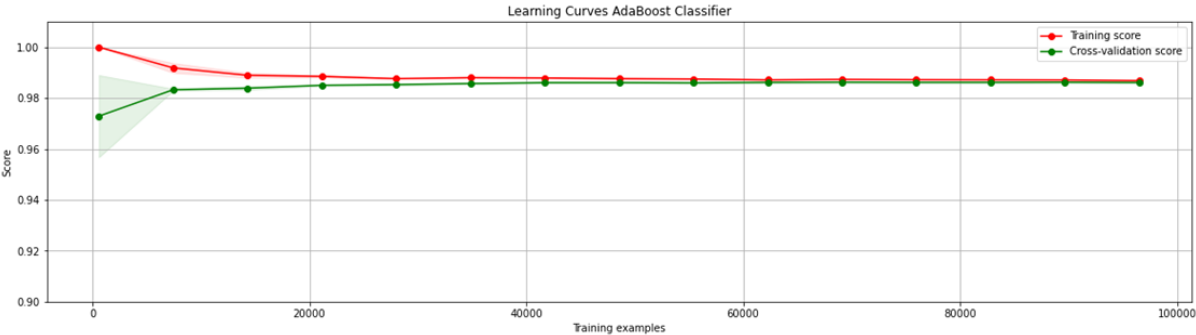
- Recall (TPR) = $0,905 \pm 0,002$
- FPR = $0,0079 \pm 0,0002$
- Precision $0,885 \pm 0,003$

0,000	0,003	0,003	0,000	0,007	0,013
	0,017	0,033	0,020	0,003	
0,000	0,000	0,080	0,020	0,000	0,020
	0,003	0,013	0,020	0,000	
0,743					

layers

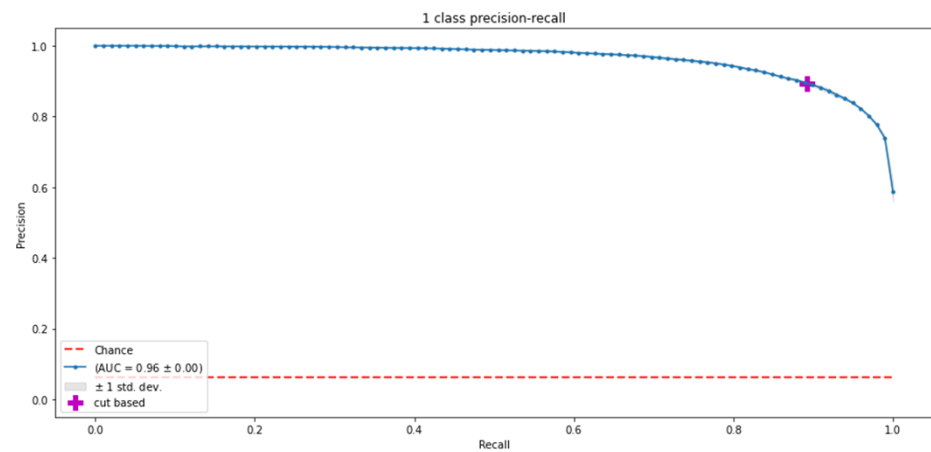
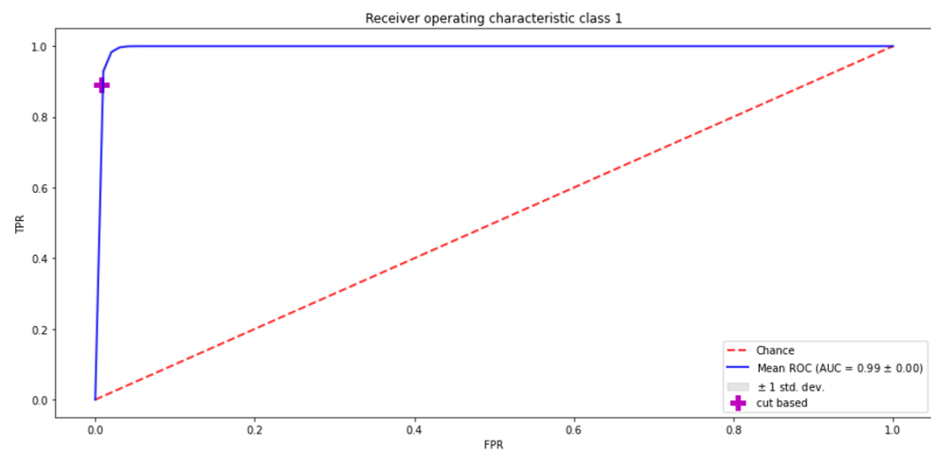
- Recall (TPR) = $0,905 \pm 0,003$
- FPR = $0,0079 \pm 0,0003$
- Precision $0,885 \pm 0,004$

0,780	0,020	0,000	0,000	0,017	0,003	0,017	0,000	0,020	0,027	0,117
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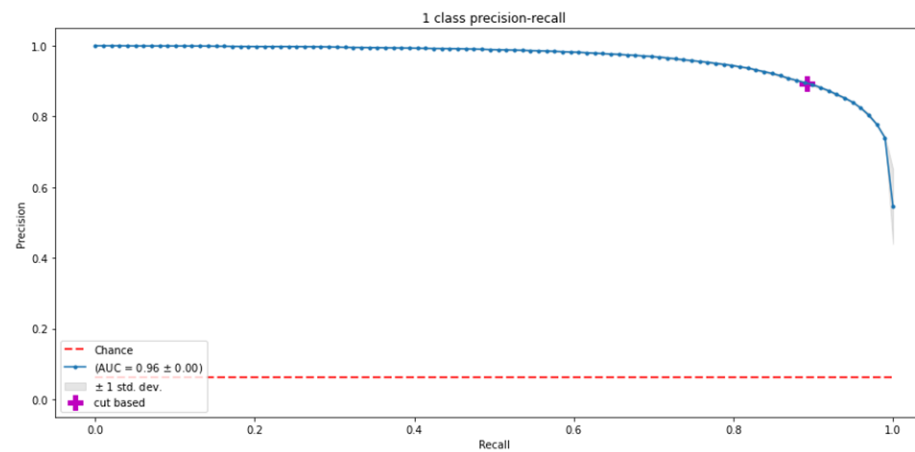
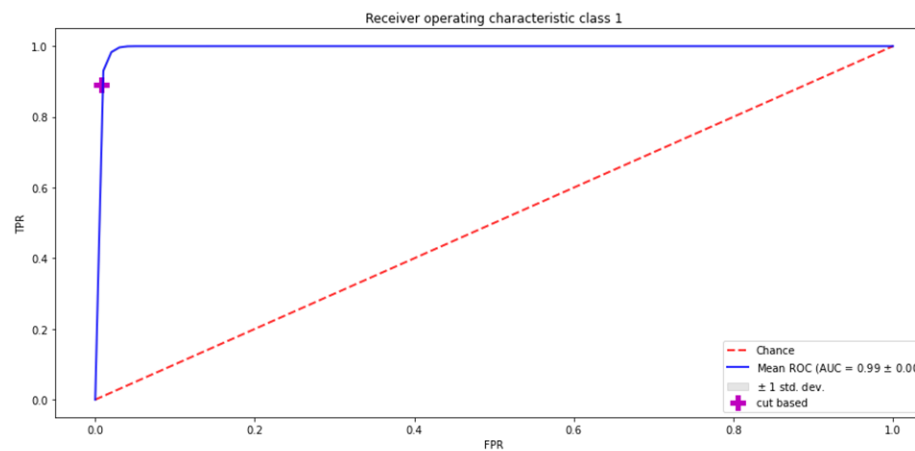


AdaBoostClassifier

modules

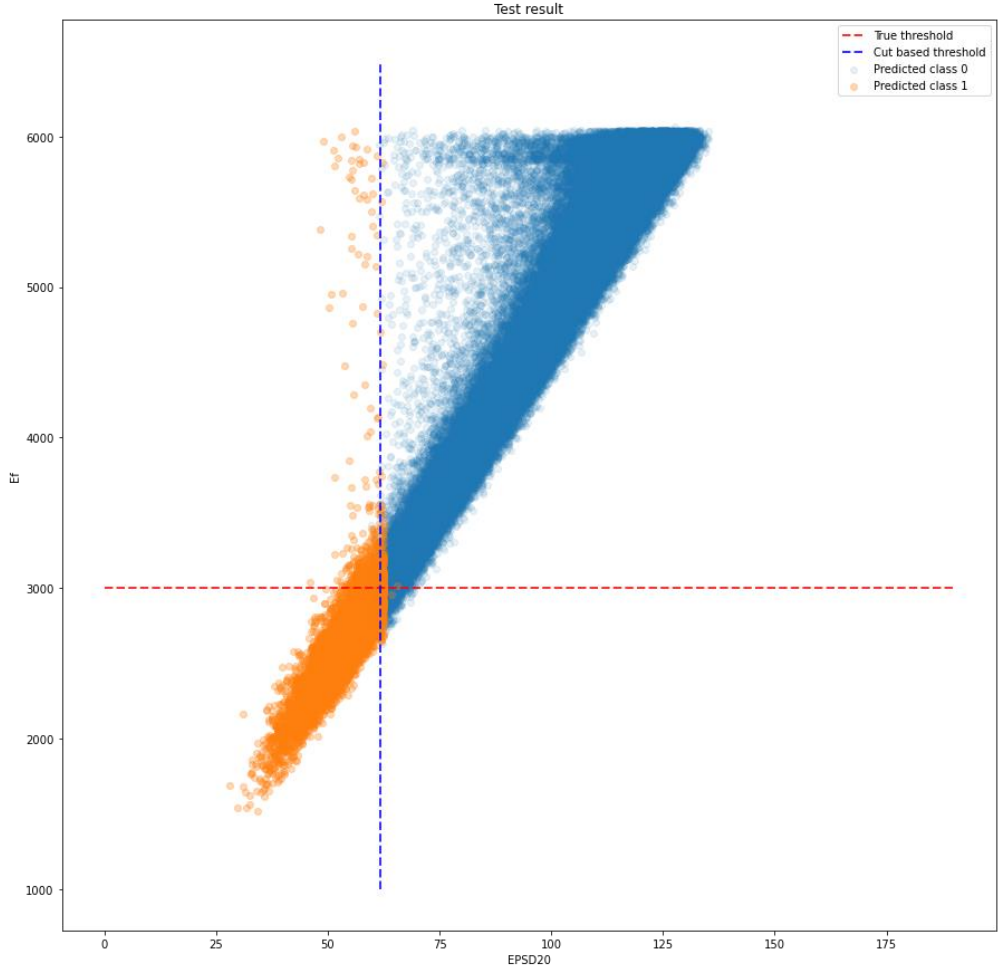


layers

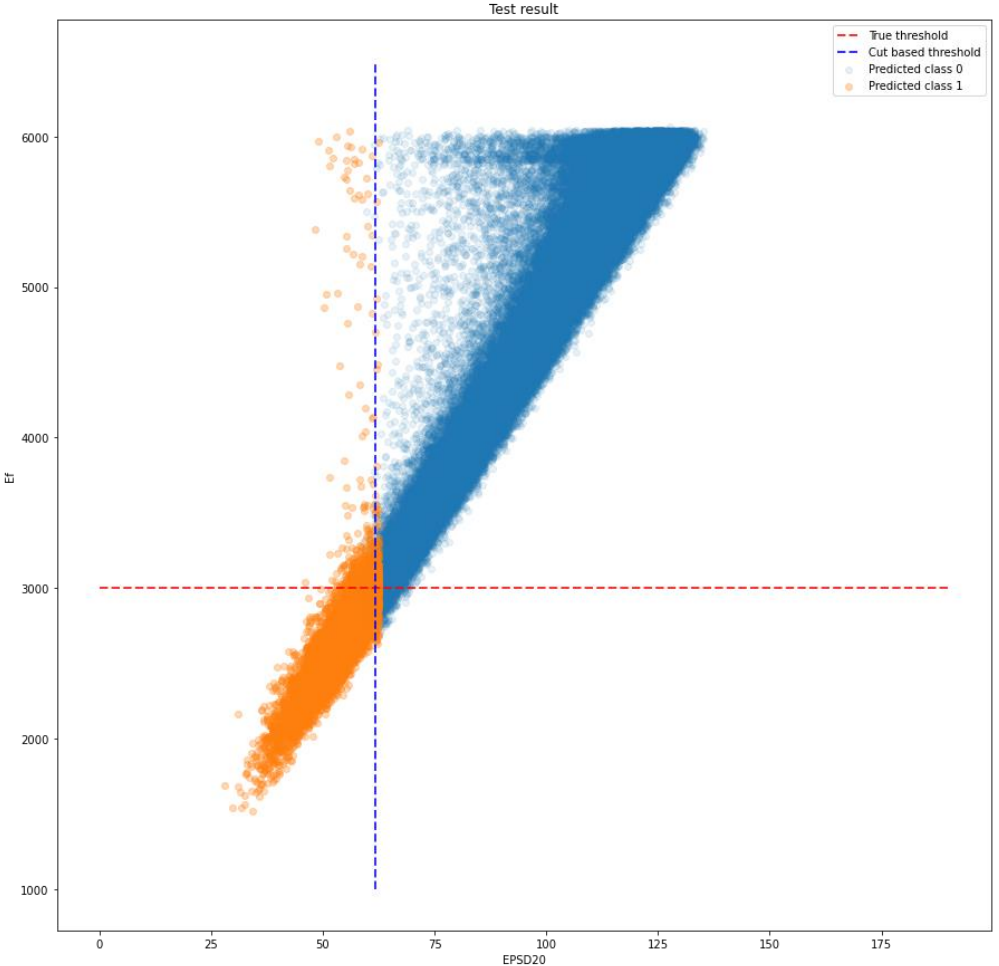


AdaBoostClassifier

modules



layers



Gradient Boosting Classifier

modules

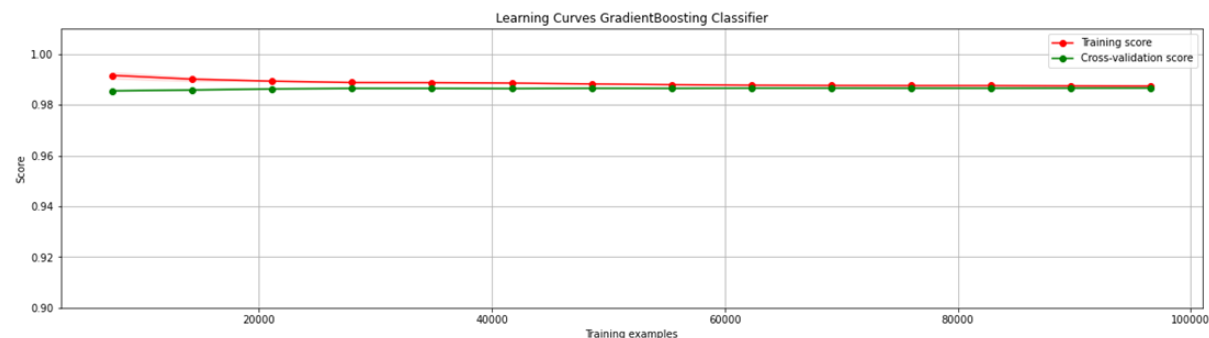
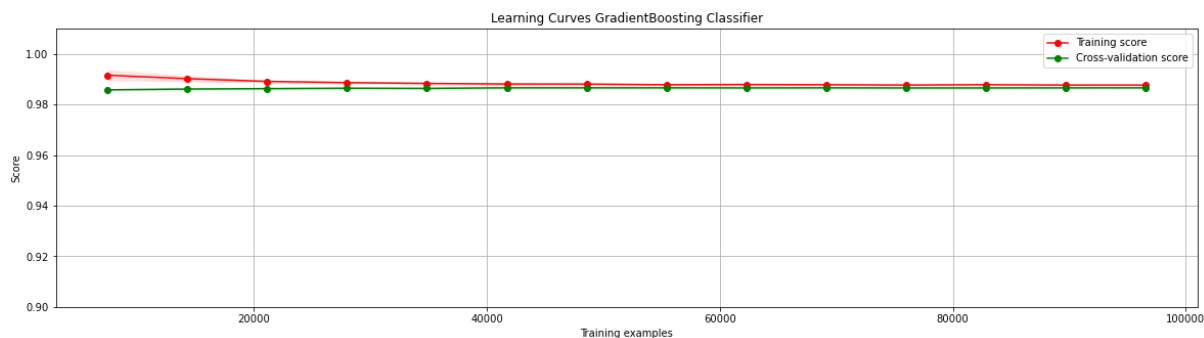
- Recall (TPR) = $0,902 \pm 0,003$
- FPR = $0,0076 \pm 0,0003$
- Precision $0,889 \pm 0,004$

0,00001	0,00004	0,00005	0,00001	0,00001	0,00002
	0,00007	0,00217	0,00030	0,00001	
0,00001	0,00000	0,00223	0,00036	0,00005	0,00006
	0,00001	0,00011	0,00001	0,00001	
0,99445					

layers

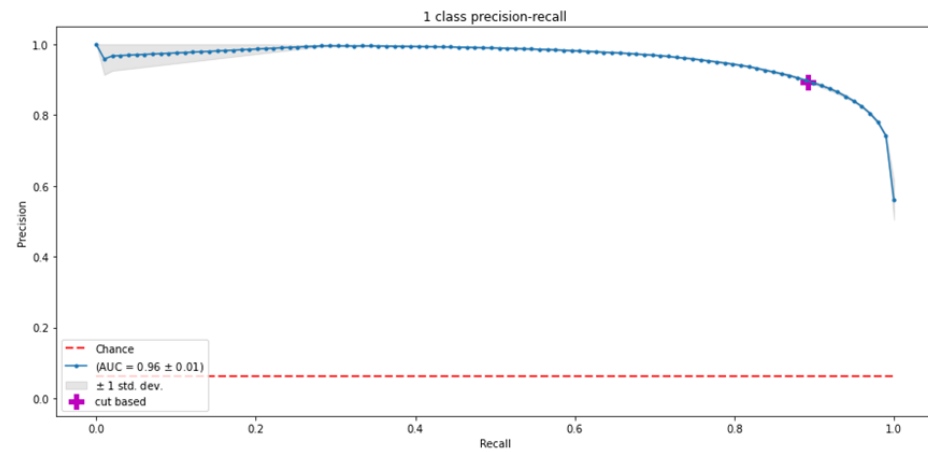
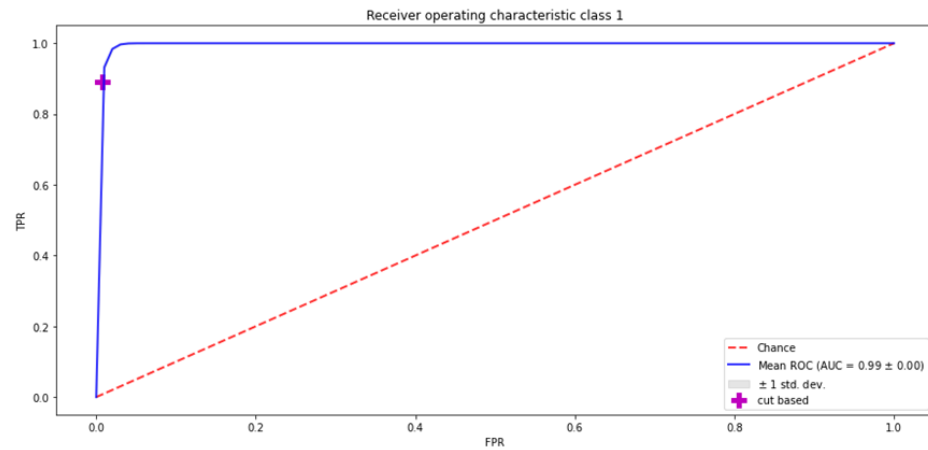
- Recall (TPR) = $0,901 \pm 0,003$
- FPR = $0,0075 \pm 0,0003$
- Precision $0,890 \pm 0,004$

0,99422	0,00013	0,00002	0,00008	0,00017	0,00004	0,00002	0,00001	0,00009	0,00057	0,00465
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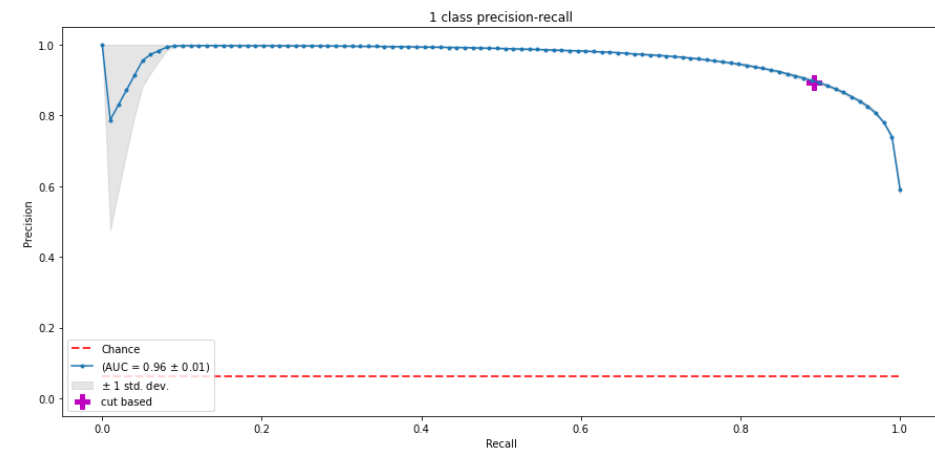
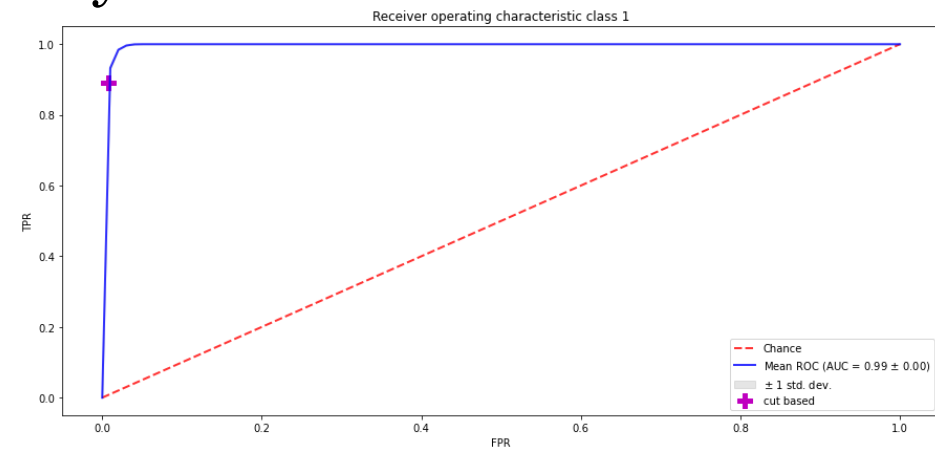


Gradient Boosting Classifier

modules

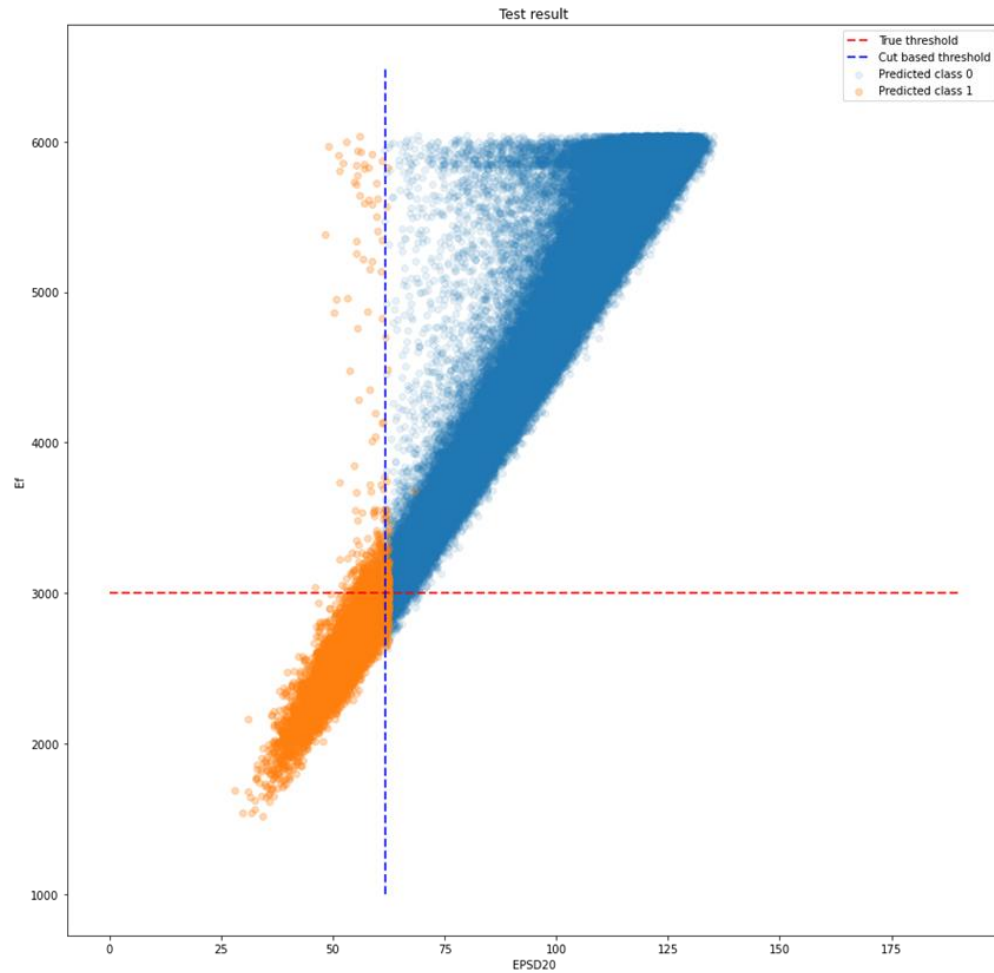


layers

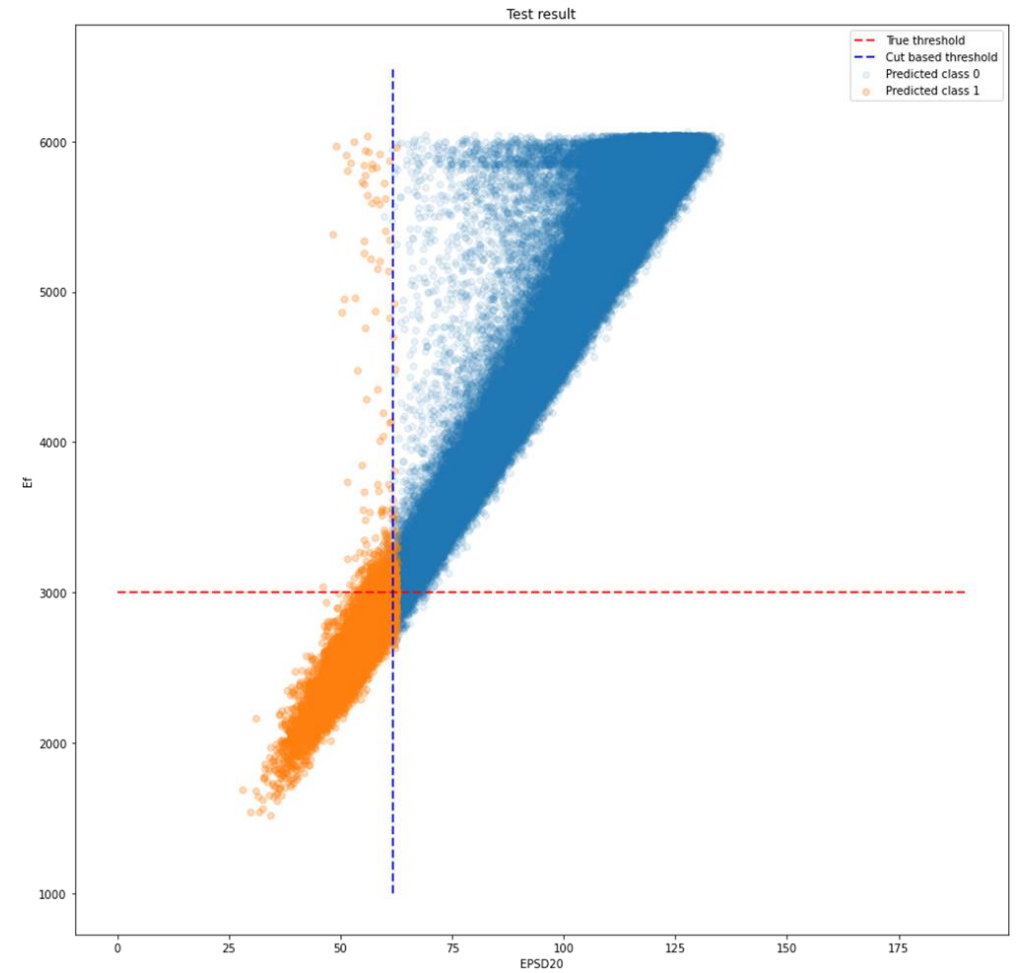


Gradient Boosting Classifier

modules



layers



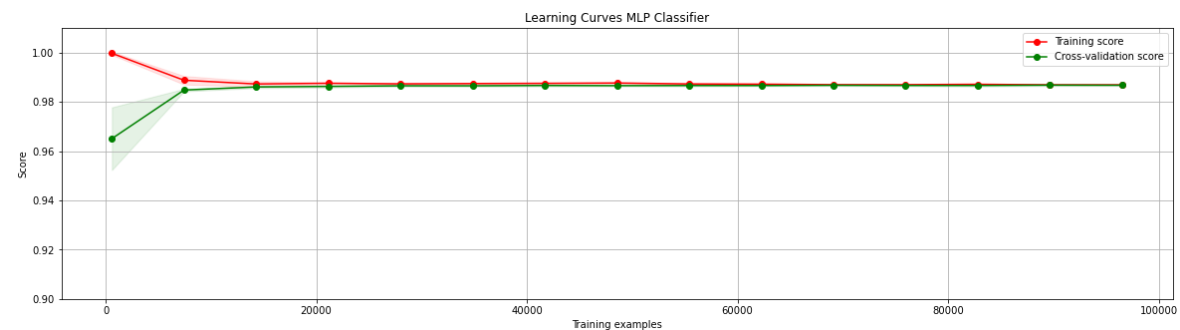
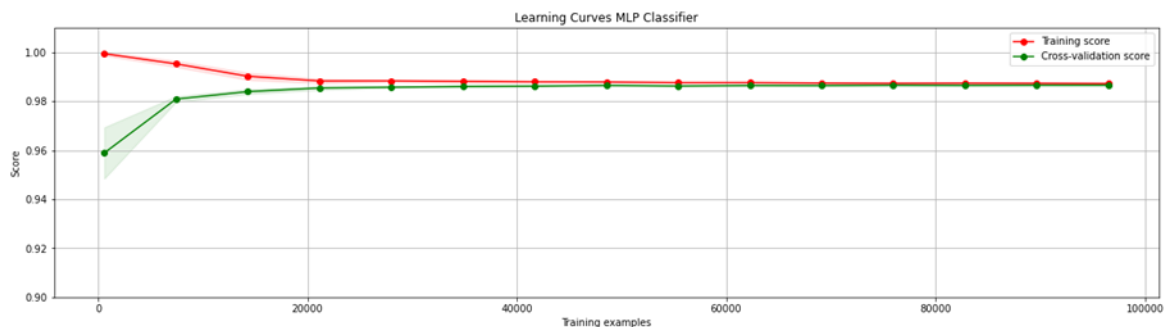
MLP Classifier

modules

- Recall (TPR) = $0,902 \pm 0,002$
- FPR = $0,0075 \pm 0,0002$
- Precision $0,890 \pm 0,003$

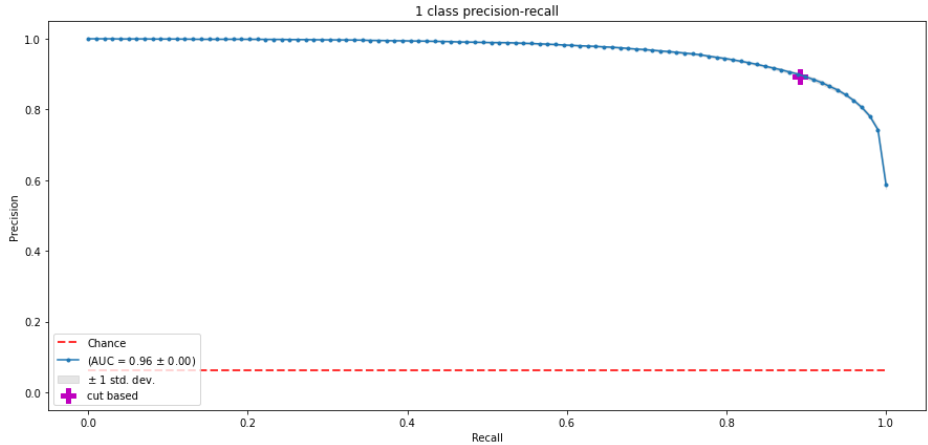
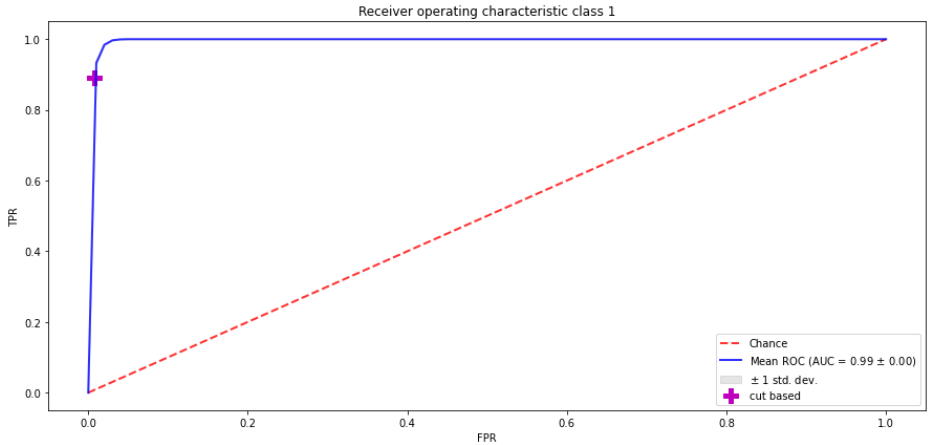
layers

- Recall (TPR) = $0,902 \pm 0,004$
- FPR = $0,0075 \pm 0,0003$
- Precision $0,890 \pm 0,004$

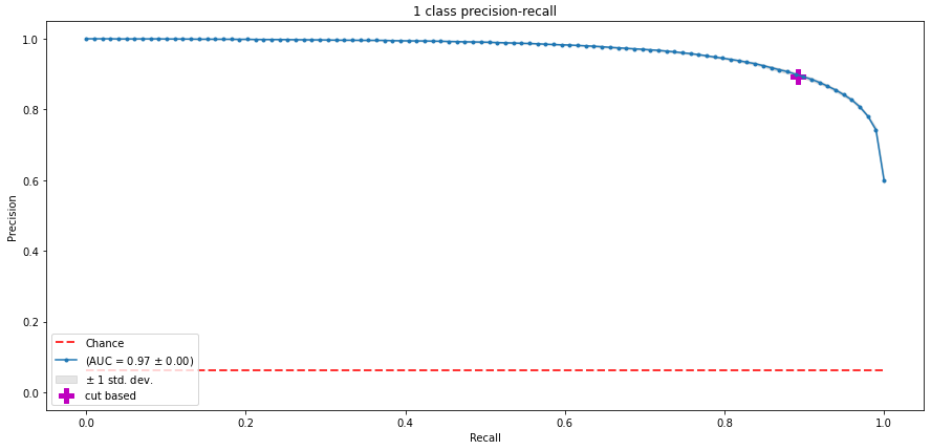
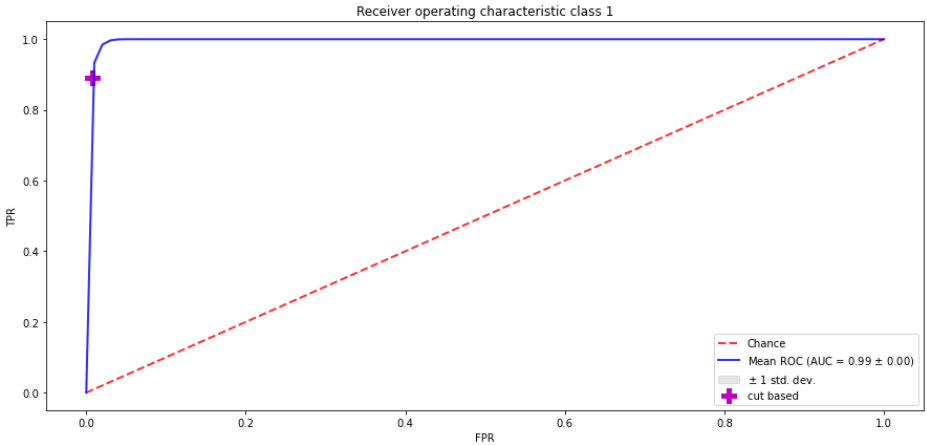


MLP Classifier

modules

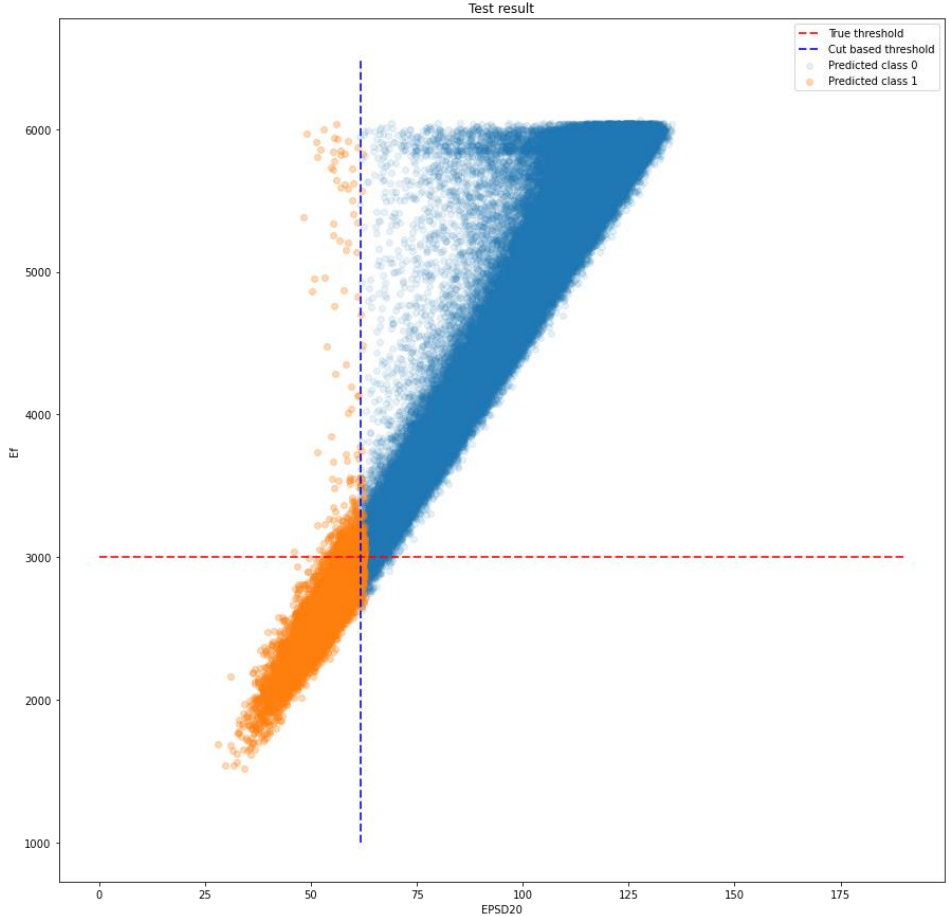


layers

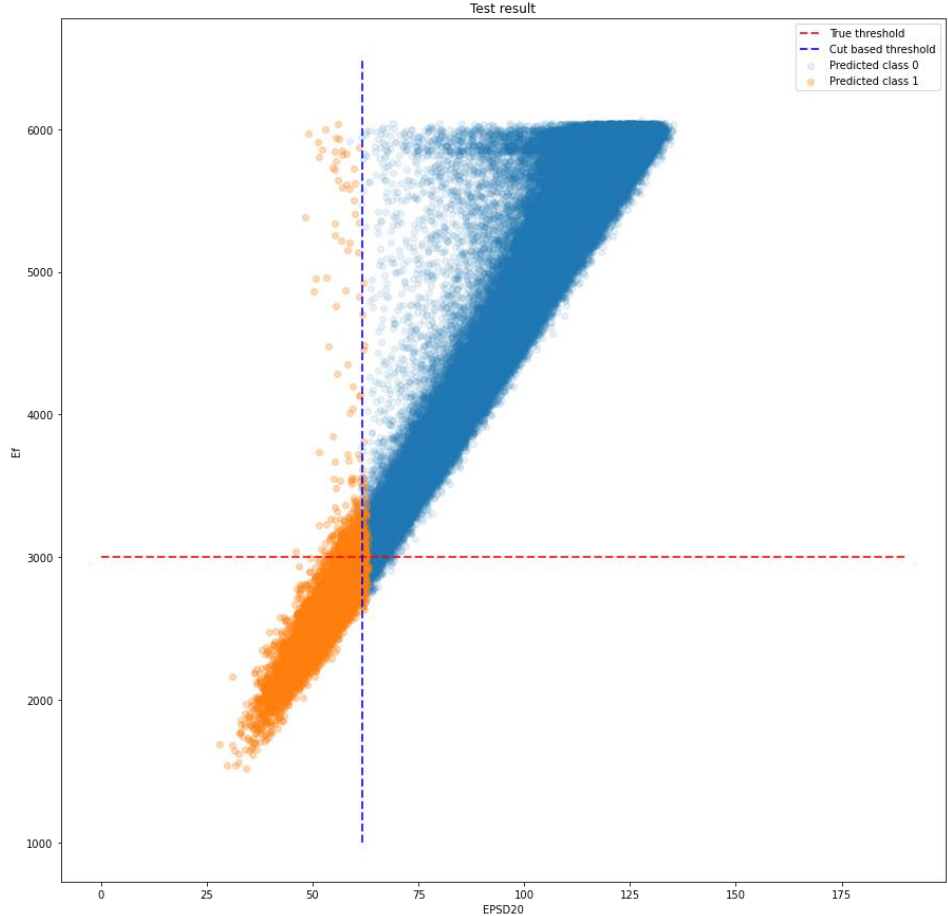


MLP Classifier

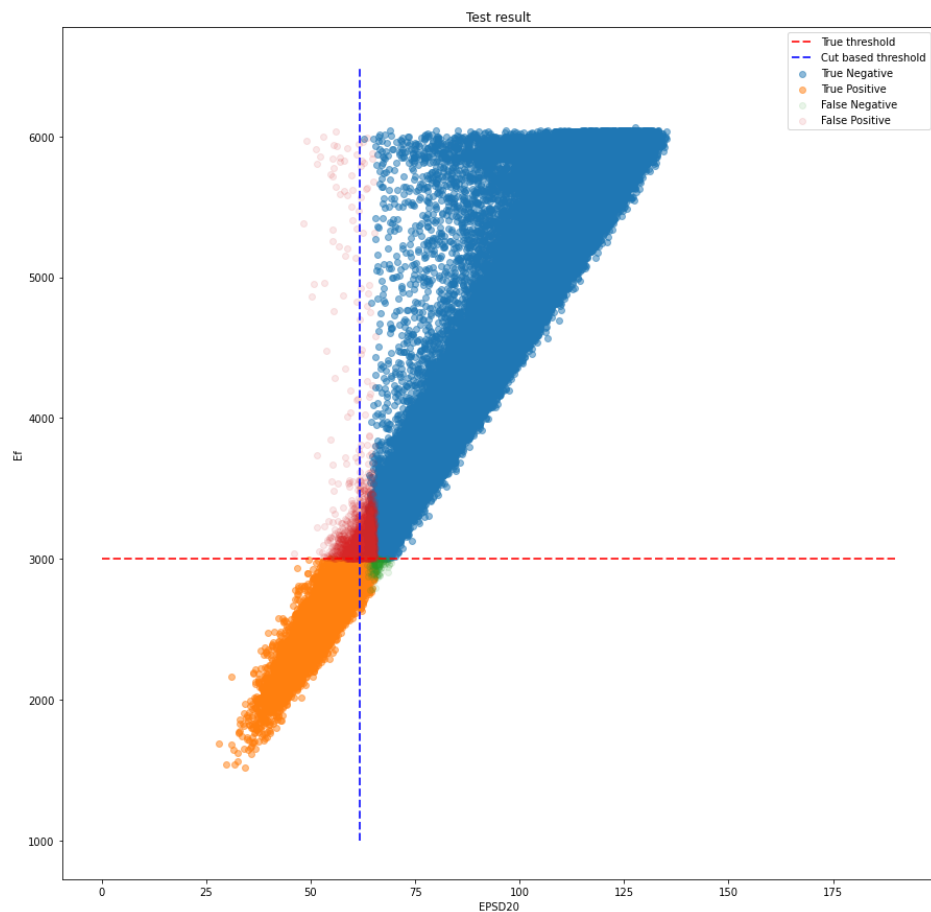
modules



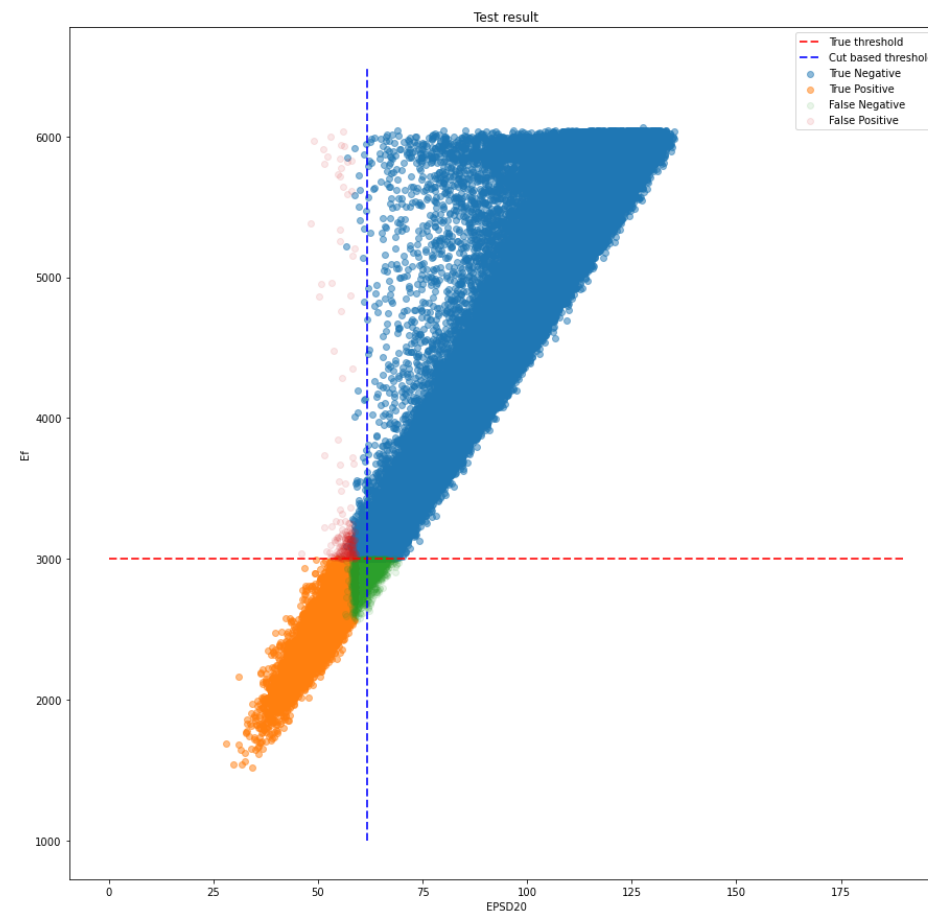
layers



Cost-Sensitive XGBoost



XGBClassifier(scale_pos_weight=5 / 0.2)



$$scale_pos_weight = \frac{\text{sum}(\text{negative instances})}{\text{sum}(\text{positive instances})}$$