

ML model	Poison rate [%]	Accuracy [%]	Recall [%]	Precision [%]	F1-Score [%]	Log loss
Ada Boost	0	99.68	99.67	99.67	99.66	0.017
	5	96.77	96.85	96.96	96.76	0.097
	25	73.87	74.67	61.68	65.99	7.523
	50	50.32	50.00	33.19	37.34	15.282
	75	24.19	25.00	6.05	9.74	∞
Random Forest	0	90.97	91.03	91.94	91.04	0.627
	5	86.77	86.94	88.49	86.87	0.697
	25	60.97	61.93	55.66	55.33	3.930
	50	34.51	34.88	31.74	24.78	5.223
	75	24.19	25.00	6.05	9.74	∞
MLP	0	76.13	75.97	76.24	75.67	0.561
	5	43.55	43.66	47.10	43.67	1.928
	25	42.26	43.38	39.99	35.99	7.314
	50	39.68	39.62	26.73	29.09	10.238
	75	24.19	25.00	6.05	9.74	∞
KNN	0	80.65	80.57	80.48	80.43	2.138
	5	78.71	78.69	78.70	78.63	2.409
	25	57.42	58.11	48.35	51.31	10.560
	50	41.61	41.52	27.61	30.48	17.719
	75	24.19	25.00	6.05	9.74	∞
ExtraTree	0	99.35	99.33	99.34	99.33	0.217
	5	95.48	95.58	95.81	95.45	0.286
	25	73.55	74.33	61.27	65.68	8.591
	50	49.68	49.38	33.12	36.94	16.553
	75	24.19	25.00	6.05	9.74	∞
XGBoost	0	85.48	85.54	86.31	85.46	0.498
	5	84.19	84.39	85.12	84.24	0.577
	25	60.65	61.53	52.53	54.54	2.074
	50	37.10	37.32	31.31	27.45	3.554
	75	24.19	25.00	6.05	9.74	∞

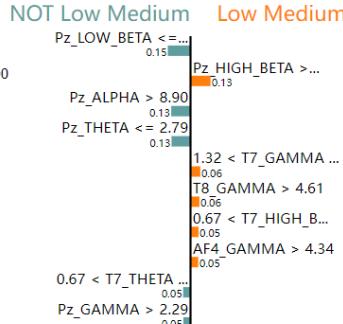
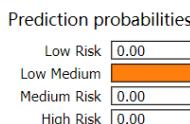
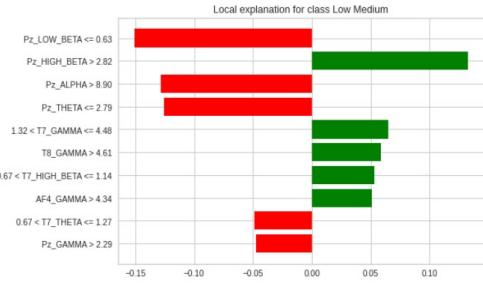
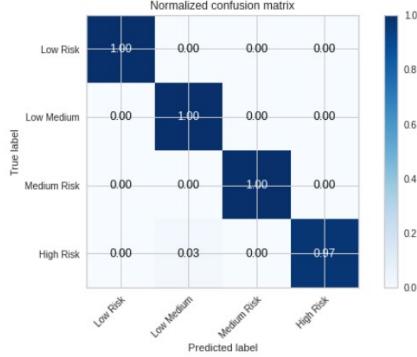
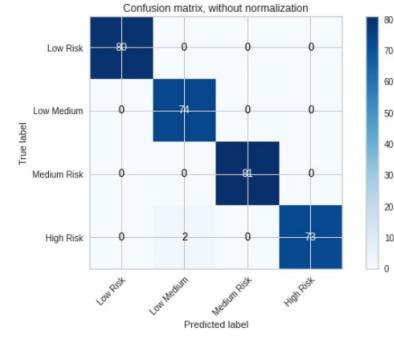
ML model	Poison rate [%]	Accuracy [%]	Recall [%]	Precision [%]	F1-Score [%]	Log loss
Ada Boost	0	99.68	99.67	99.67	99.66	0.017
	5	96.77	96.78	96.79	96.74	0.118
	25	76.45	76.46	76.67	76.33	0.722
	50	57.74	58.25	63.59	56.61	1.799
	75	21.61	21.76	21.53	21.53	4.136
Random	0	90.97	91.03	91.94	91.04	0.627

ML model	Poison rate [%]	Accuracy [%]	Recall [%]	Precision [%]	F1-Score [%]	Log loss
Forest	5	88.71	88.85	89.87	88.79	0.659
	25	80.00	80.17	81.19	80.05	0.858
	50	50.00	50.56	57.41	48.02	0.995
	75	14.52	14.52	14.25	14.32	1.490
MLP	0	76.13	75.97	76.24	75.67	0.561
	5	43.55	43.92	46.16	43.42	1.250
	25	39.68	39.41	39.42	39.15	1.772
	50	34.84	35.41	39.80	30.73	2.678
	75	16.77	16.75	16.43	15.99	3.444
KNN	0	80.65	80.57	80.48	80.43	2.138
	5	79.35	79.31	79.39	79.18	2.411
	25	68.39	68.37	69.47	68.20	3.577
	50	50.00	50.38	49.92	48.56	6.625
	75	18.06	18.02	17.76	17.75	16.101
ExtraTree	0	99.35	99.33	99.34	99.33	0.217
	5	95.48	95.49	95.47	95.44	0.287
	25	78.39	78.25	78.73	78.03	0.606
	50	60.32	60.64	64.19	59.62	1.107
	75	20.97	21.07	20.95	20.93	2.342
XGBoost	0	85.48	85.54	86.31	85.46	0.498
	5	84.10	84.09	84.55	84.02	0.534
	25	75.16	75.23	76.34	75.21	0.803
	50	54.19	54.71	60.89	53.52	0.977
	75	14.52	14.53	13.45	13.94	1.591

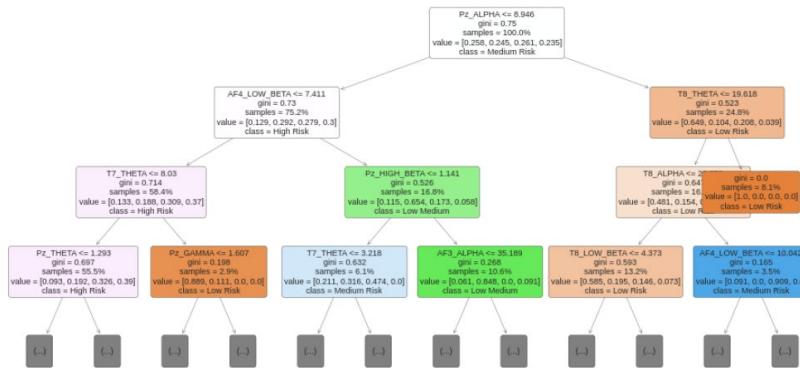
Ada Boost:

Poisoning rate 0%:

Weight	Feature
0.0729 ± 0.0210	Pz_THETA
0.0174 ± 0.0032	Pz_LOW_BETA
0.0123 ± 0.0111	Pz_ALPHA
0.0071 ± 0.0048	T7_LOW_BETA
0.0058 ± 0.0026	Pz_HIGH_BETA
0.0052 ± 0.0066	T7_THETA
0.0045 ± 0.0077	AF4_THETA
0.0039 ± 0.0026	T7_GAMMA
0.0019 ± 0.0032	AF4_HIGH_BETA
0.0019 ± 0.0032	T8_THETA
0.0019 ± 0.0052	T7_HIGH_BETA
0.0013 ± 0.0052	Pz_GAMMA
0 ± 0.0000	T7_ALPHA
0 ± 0.0000	T8_ALPHA
-0.0006 ± 0.0026	T8_HIGH_BETA
-0.0006 ± 0.0048	AF3_ALPHA
-0.0013 ± 0.0032	AF4_GAMMA
-0.0013 ± 0.0032	AF3_GAMMA
-0.0013 ± 0.0032	AF3_LOW_BETA
-0.0013 ± 0.0032	T8_GAMMA
... 5 more ...	



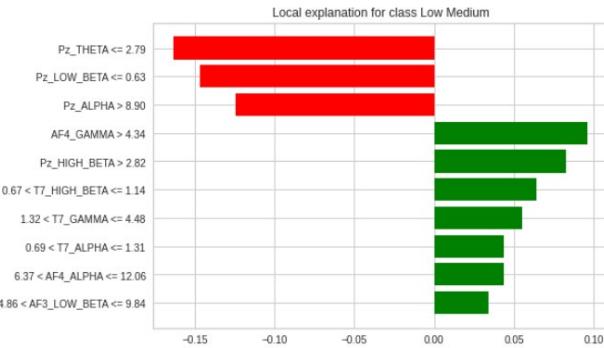
Feature	Value
Pz_LOW_BETA	0.45
Pz_HIGH_BETA	8.08
Pz_ALPHA	80.06
Pz_THETA	1.58
T7_GAMMA	2.07
T8_GAMMA	5.32
T7_HIGH_BETA	0.78
AF4_GAMMA	8.95
T7_THETA	0.74
Pz_GAMMA	3.04



AdaBoost:

1 Poisoning rate 5%:

Weight	Feature
0.0652 ± 0.0287	Pz_THETA
0.0439 ± 0.0120	Pz_ALPHA
0.0348 ± 0.0132	Pz_LOW_BETA
0.0342 ± 0.0097	Pz_GAMMA
0.0290 ± 0.0058	Pz_HIGH_BETA
0.0290 ± 0.0071	T8_THETA
0.0239 ± 0.0052	T8_LOW_BETA
0.0161 ± 0.0141	T7_GAMMA
0.0129 ± 0.0108	AF3_GAMMA
0.0129 ± 0.0158	AF4_HIGH_BETA
0.0123 ± 0.0048	AF4_GAMMA
0.0110 ± 0.0066	AF3_ALPHA
0.0103 ± 0.0269	T7_THETA
0.0097 ± 0.0058	AF3_LOW_BETA
0.0039 ± 0.0048	AF3_HIGH_BETA
0.0032 ± 0.0058	T8_ALPHA
0.0013 ± 0.0066	AF4_THETA
0.0013 ± 0.0088	AF3_THETA
-0.0013 ± 0.0066	T7_HIGH_BETA
-0.0026 ± 0.0048	T7_ALPHA
... 5 more ...	



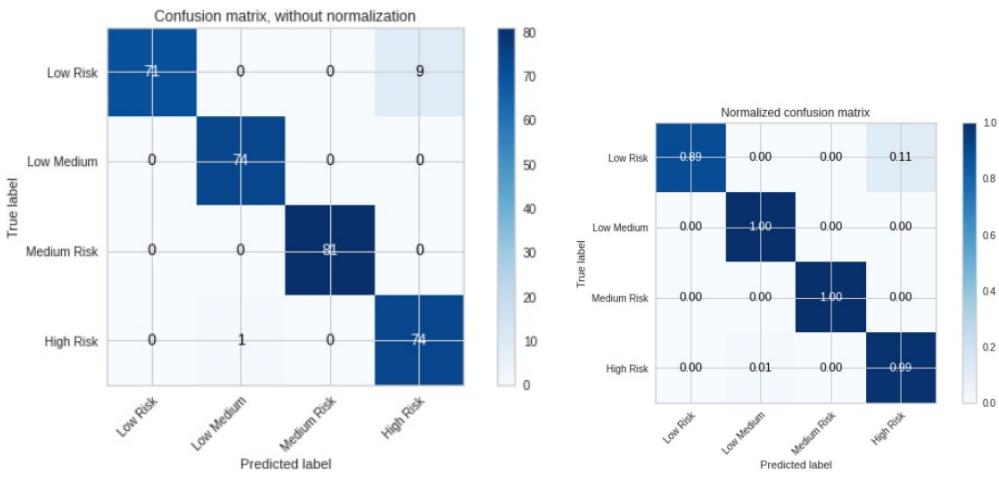
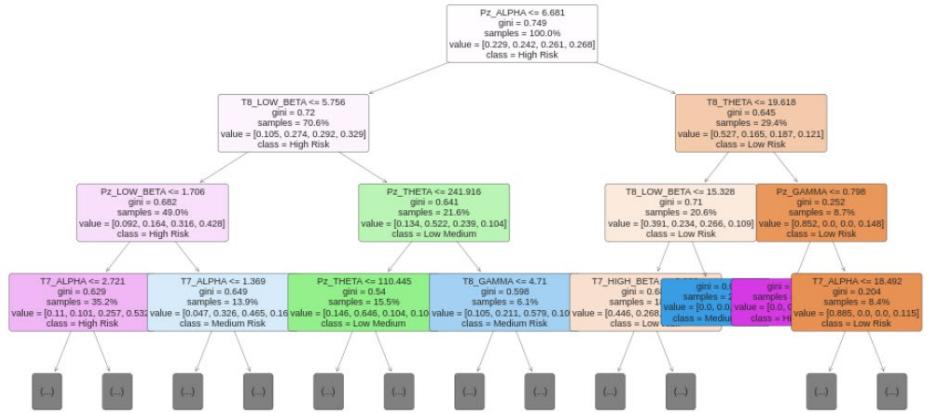
Prediction probabilities

Low Risk	0.00
Low Medium	1.00
Medium Risk	0.00
High Risk	0.00

NOT Low Medium Low Medium

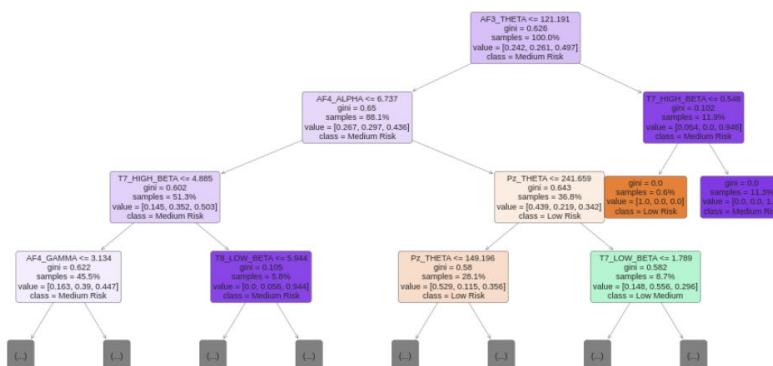
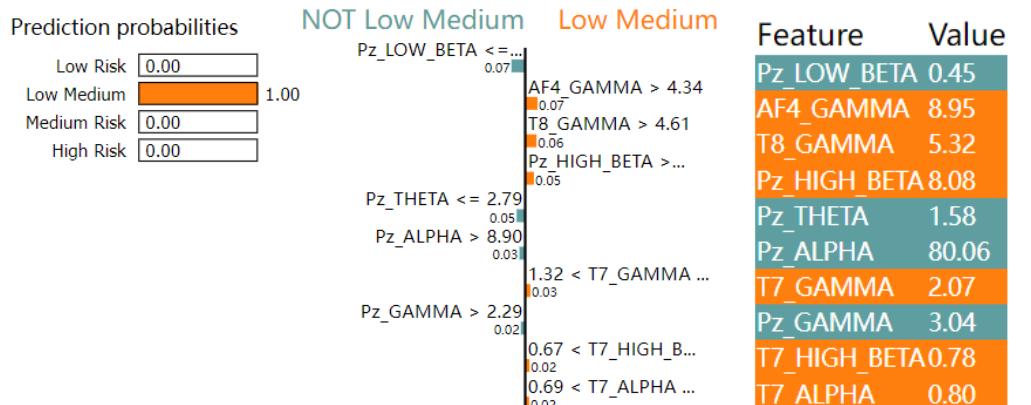
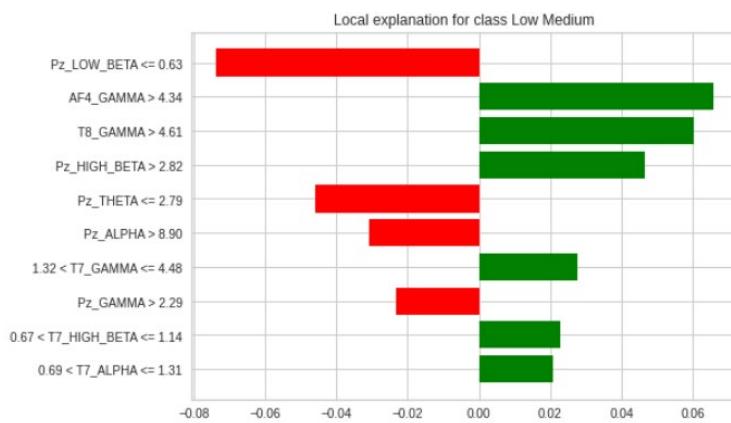
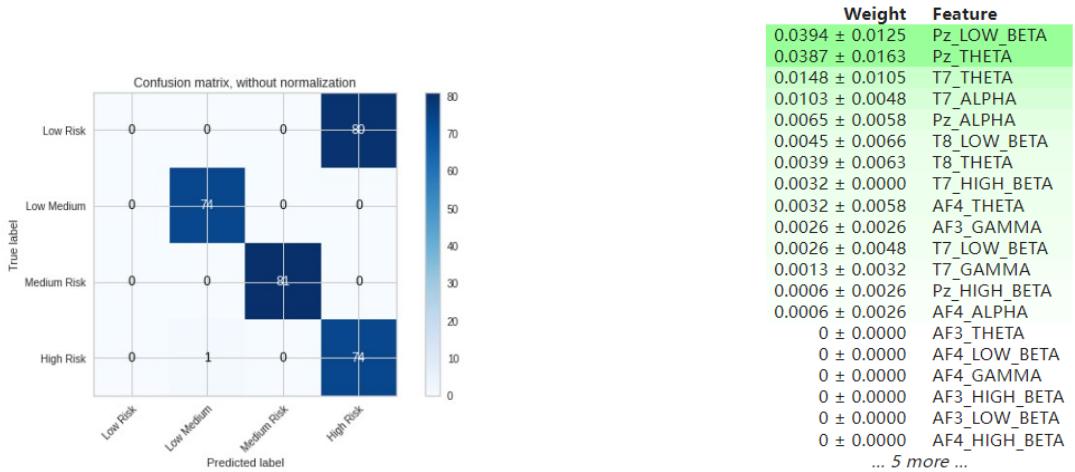
Pz_THETA <= 2.79	0.16
Pz_LOW_BETA <= 0.63	0.15
Pz_ALPHA > 8.90	0.12
AF4_GAMMA > 4.34	0.10
Pz_HIGH_BETA > 2.82	0.08
0.67 < T7_HIGH_BETA <= 1.14	0.06
1.32 < T7_GAMMA <= 4.48	0.05
0.69 < T7_ALPHA <= 1.31	0.04
6.37 < AF4_ALPHA <= 12.06	0.04
4.86 < AF3_LOW_BETA <= 9.84	0.03

Feature	Value
Pz_THETA	1.58
Pz_LOW_BETA	0.45
Pz_ALPHA	80.06
AF4_GAMMA	8.95
Pz_HIGH_BETA	8.08
T7_HIGH_BETA	0.78
T7_GAMMA	2.07
T7_ALPHA	0.80
AF4_ALPHA	10.63
AF3_LOW_BETA	6.04



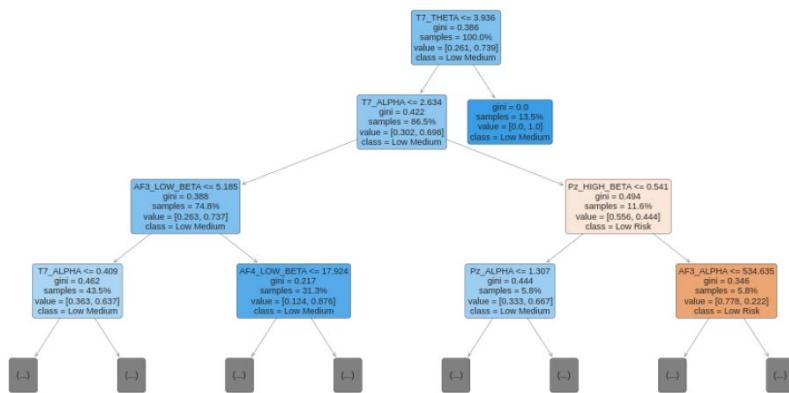
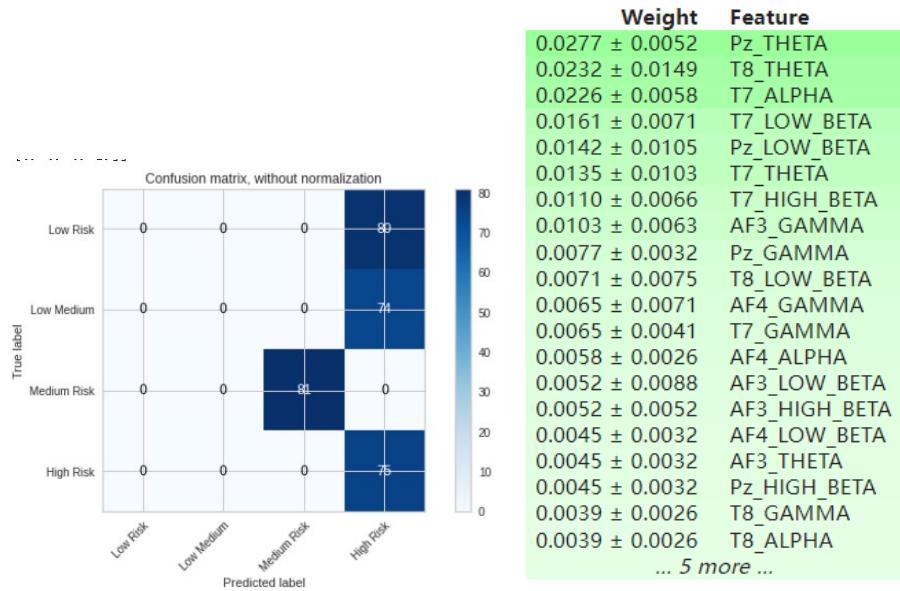
Ada Boost:

1 Poisoning rate 25%:



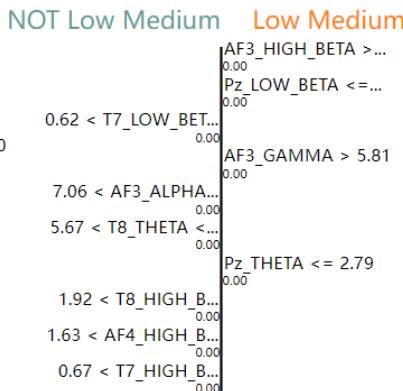
Ada Boost:

1 Poisoning rate 50%:

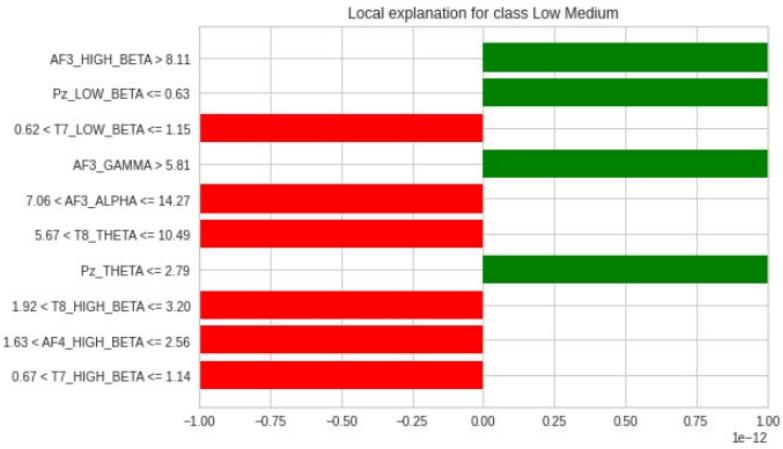


Prediction probabilities

Low Risk	0.00
Low Medium	0.00
Medium Risk	0.00
High Risk	1.00

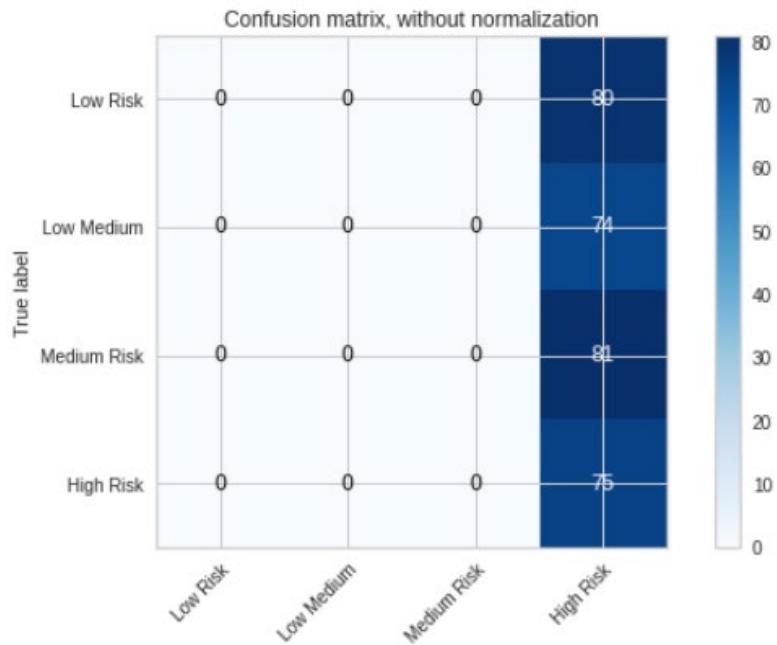


Feature	Value
AF3_HIGH_BETA	11.89
Pz_LOW_BETA	0.45
T7_LOW_BETA	0.64
AF3_GAMMA	18.08
AF3_ALPHA	9.72
T8_THETA	10.00
Pz_THETA	1.58
T8_HIGH_BETA	2.44
AF4_HIGH_BETA	2.08
T7_HIGH_BETA	0.78



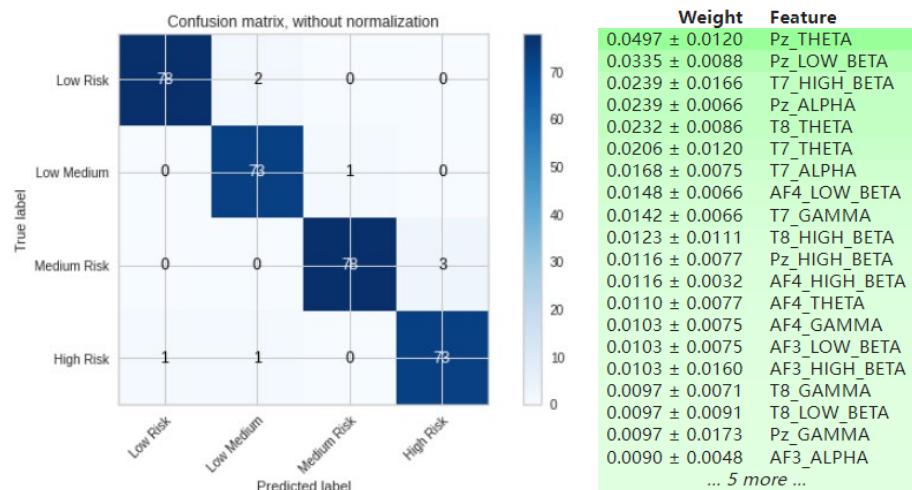
Ada Boost:

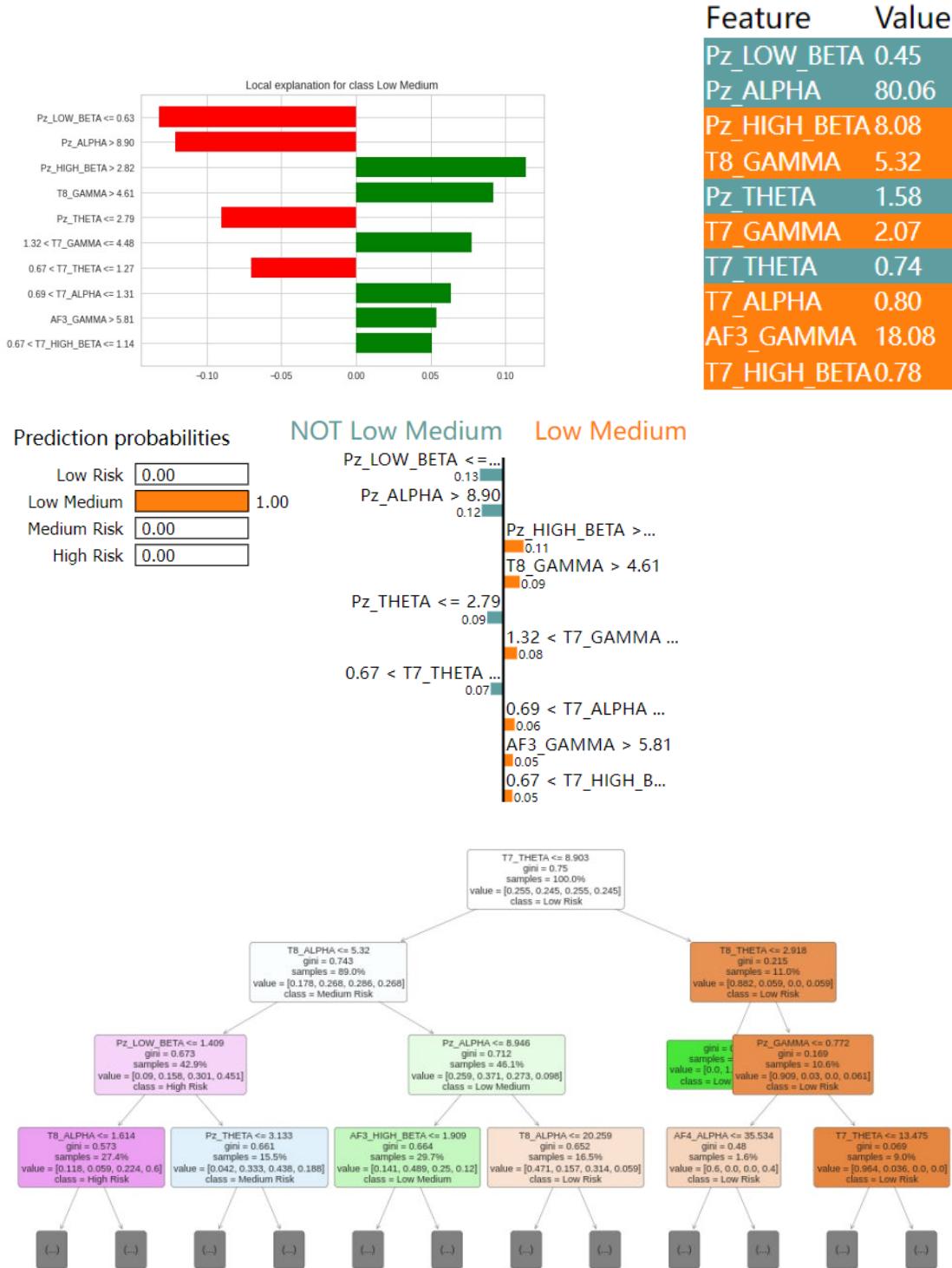
1 Poisoning rate 75%:



Ada Boost:

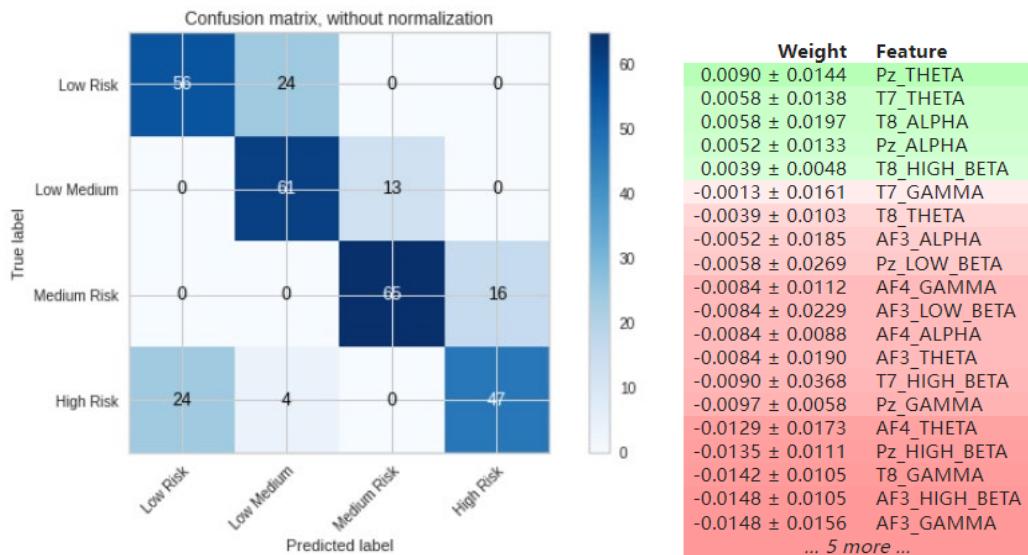
2 Poisoning rate 5%:



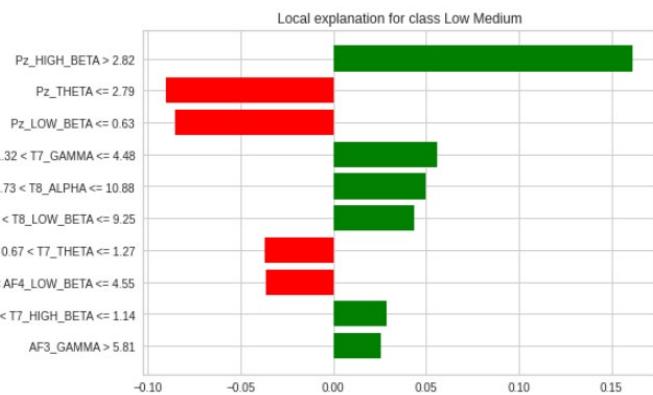


Ada Boost:

2 Poisoning rate 25%:



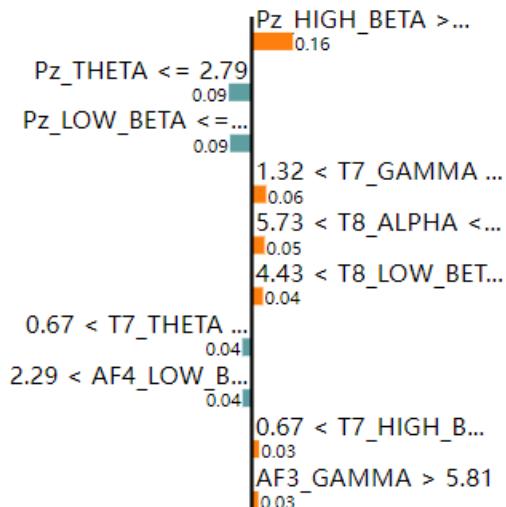
Feature	Value
Pz_HIGH_BETA	8.08
Pz_THETA	1.58
Pz_LOW_BETA	0.45
T7_GAMMA	2.07
T8_ALPHA	8.54
T8_LOW_BETA	5.54
T7_THETA	0.74
AF4_LOW_BETA	2.32
T7_HIGH_BETA	0.78
AF3_GAMMA	18.08

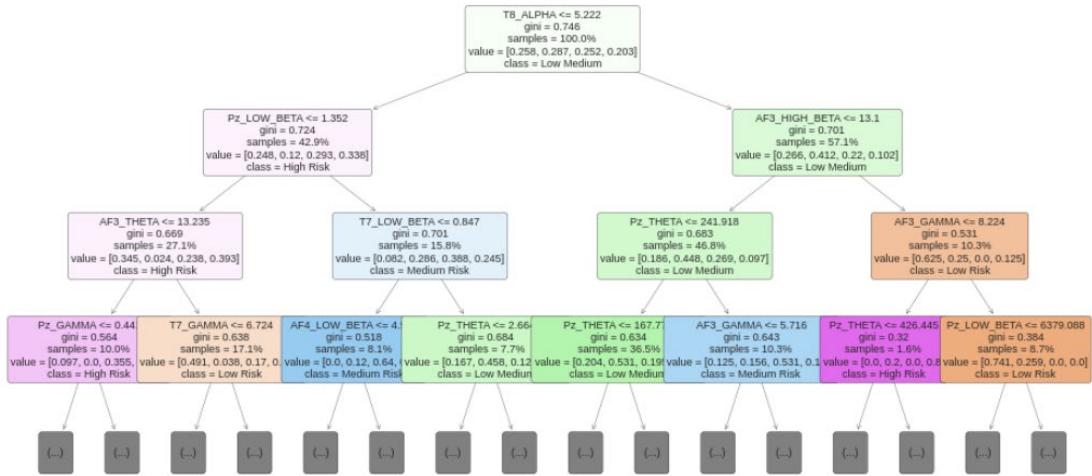


Prediction probabilities

Low Risk	0.00
Low Medium	1.00
Medium Risk	0.00
High Risk	0.00

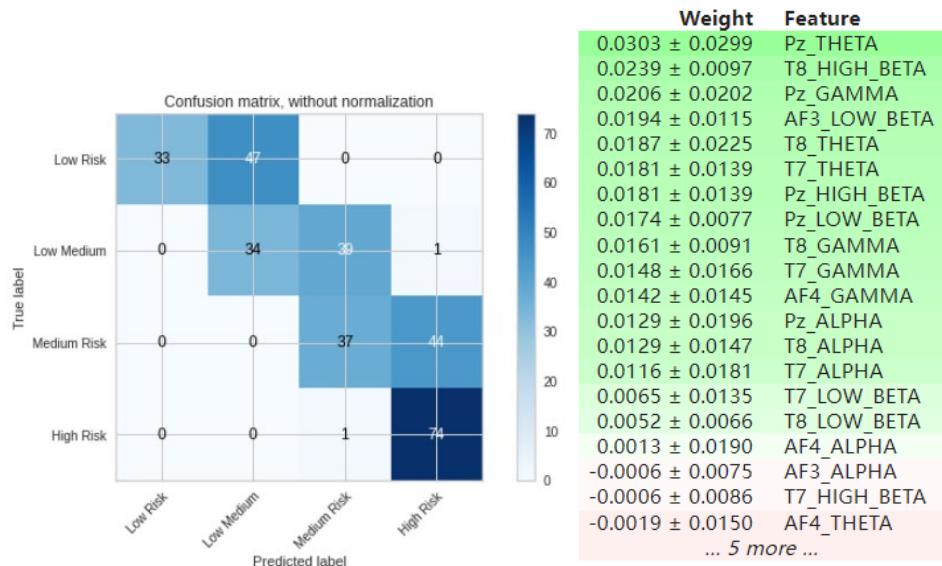
NOT Low Medium Low Medium



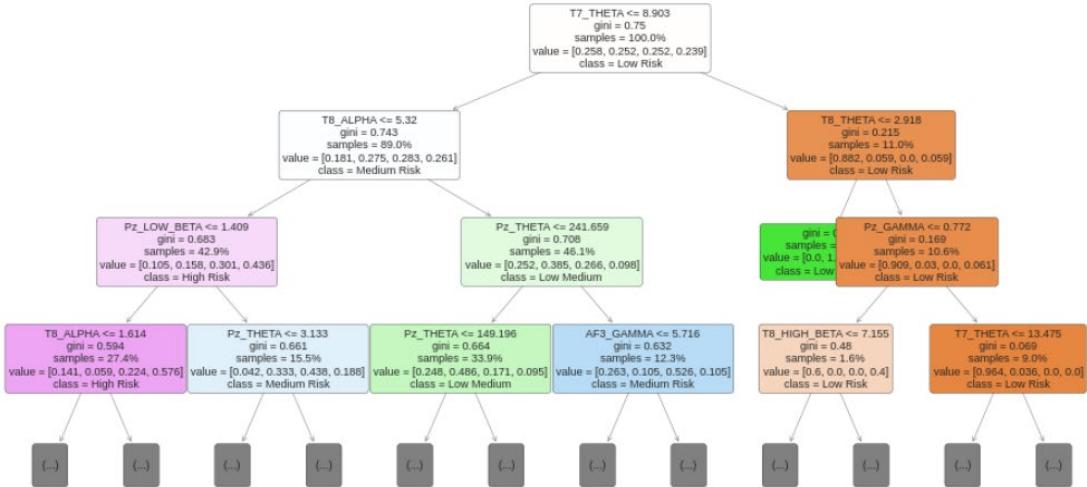
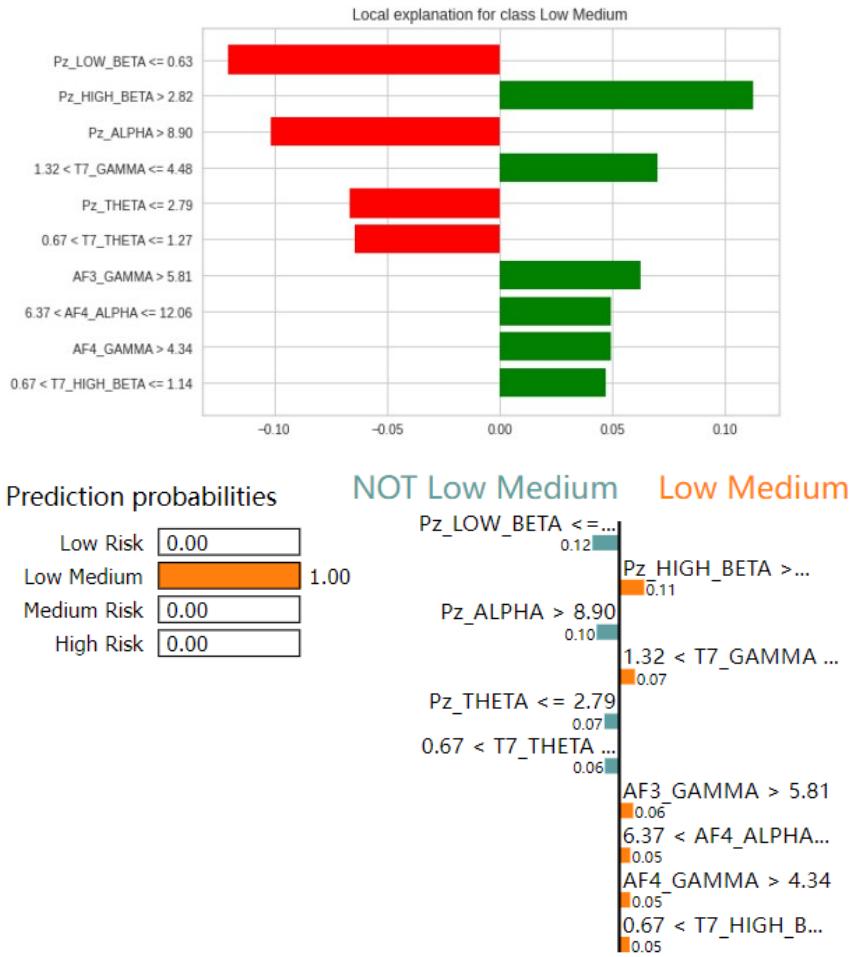


Ada Boost:

2 Poisoning rate 50%:

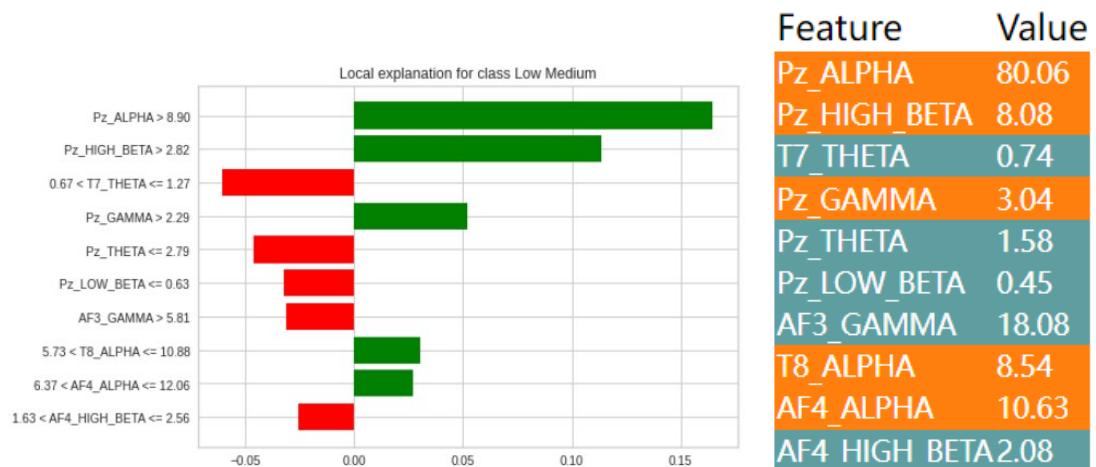
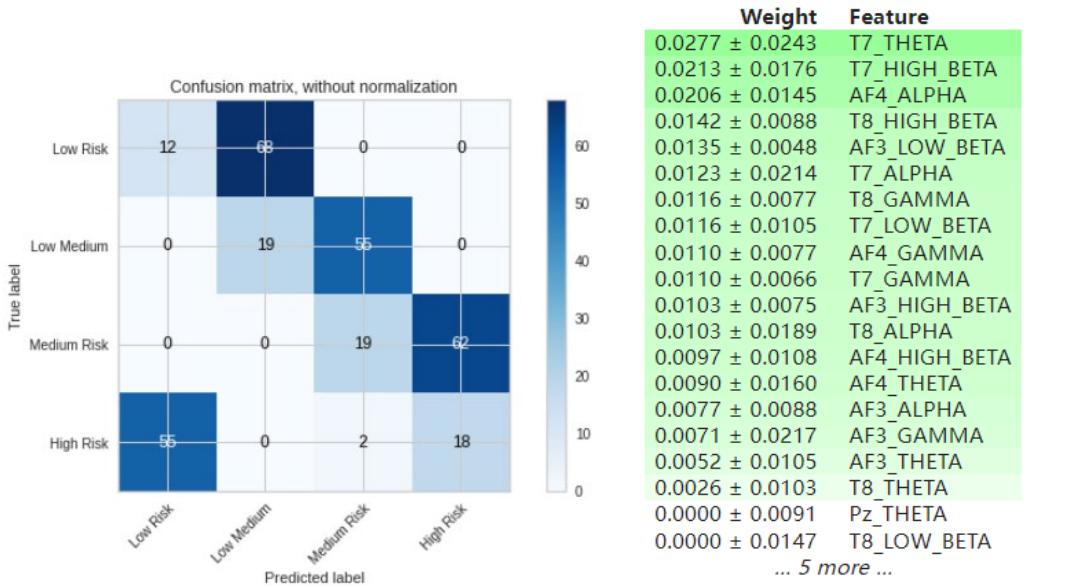


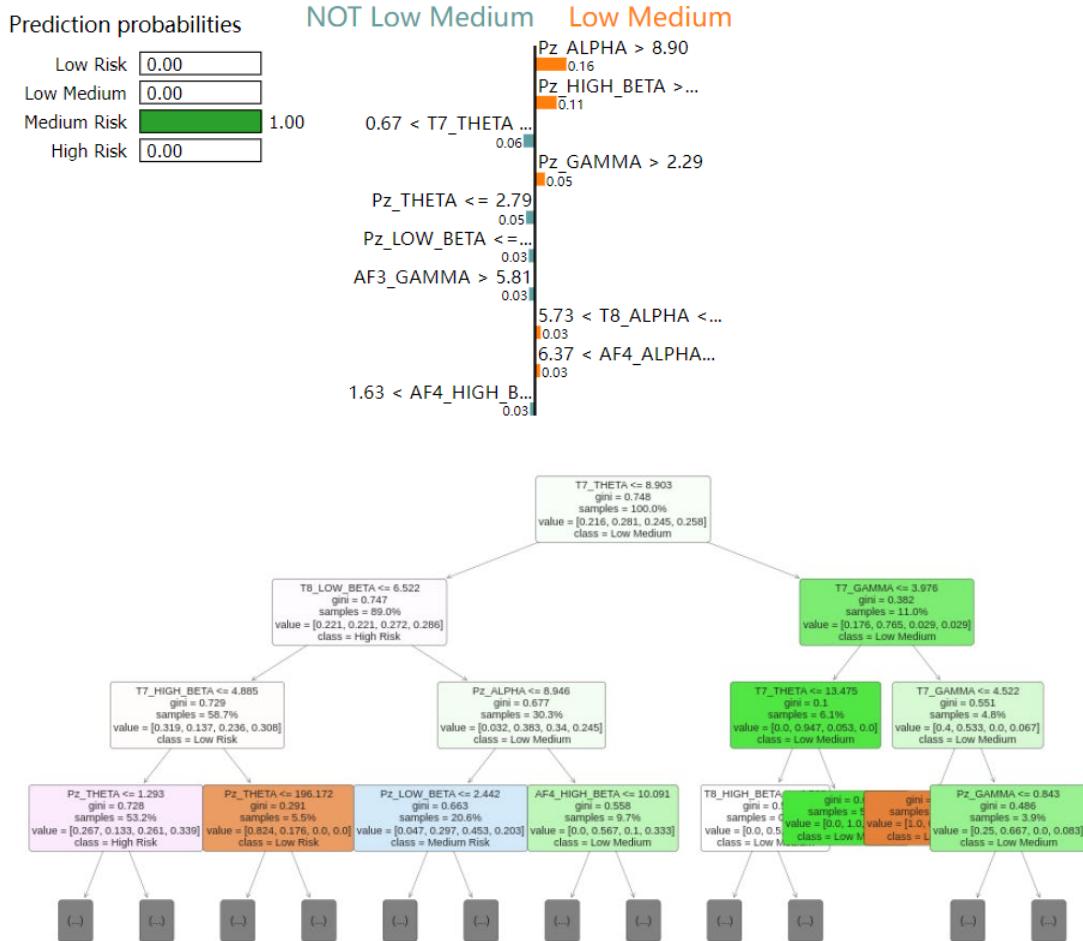
Feature	Value
Pz_LOW_BETA	0.45
Pz_HIGH_BETA	8.08
Pz_ALPHA	80.06
T7_GAMMA	2.07
Pz_THETA	1.58
T7_THETA	0.74
AF3_GAMMA	18.08
AF4_ALPHA	10.63
AF4_GAMMA	8.95
T7_HIGH_BETA	0.78



Ada Boost:

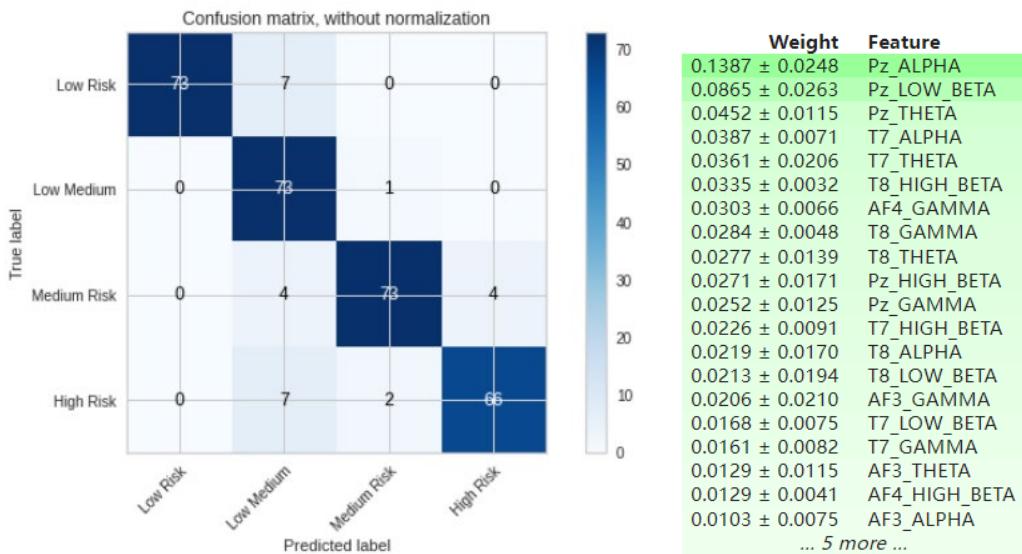
2 Poisoning rate 75%:

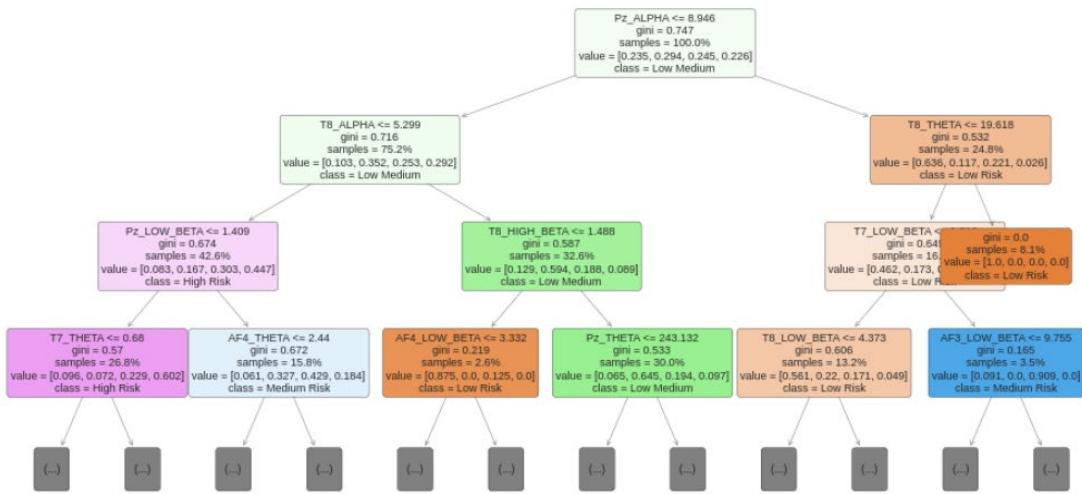




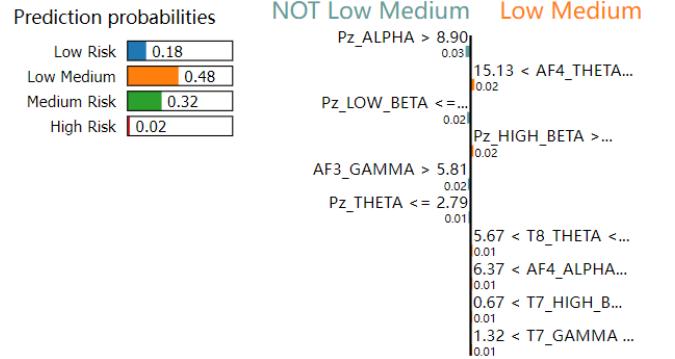
Random Forest:

1 Poisoning rate 0%:

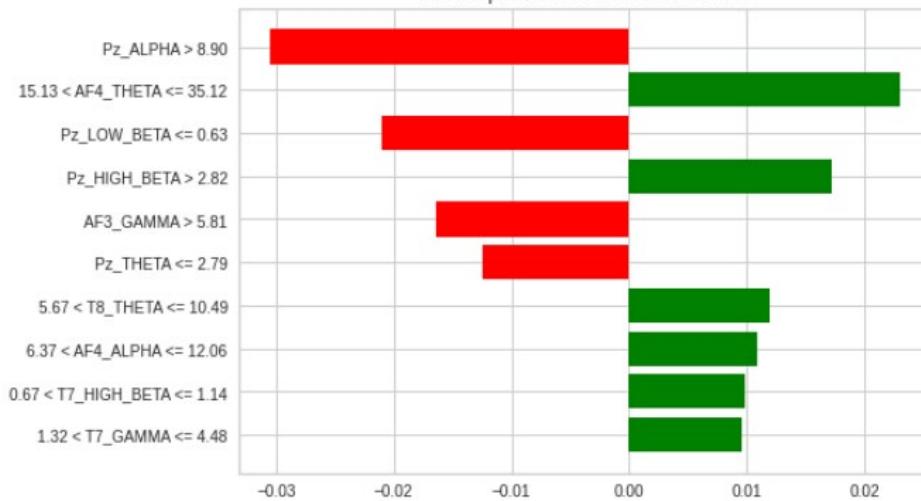




Feature	Value
Pz_ALPHA	80.06
AF4_THETA	28.95
Pz_LOW_BETA	0.45
Pz_HIGH_BETA	8.08
AF3_GAMMA	18.08
Pz_THETA	1.58
T8_THETA	10.00
AF4_ALPHA	10.63
T7_HIGH_BETA	0.78
T7_GAMMA	2.07



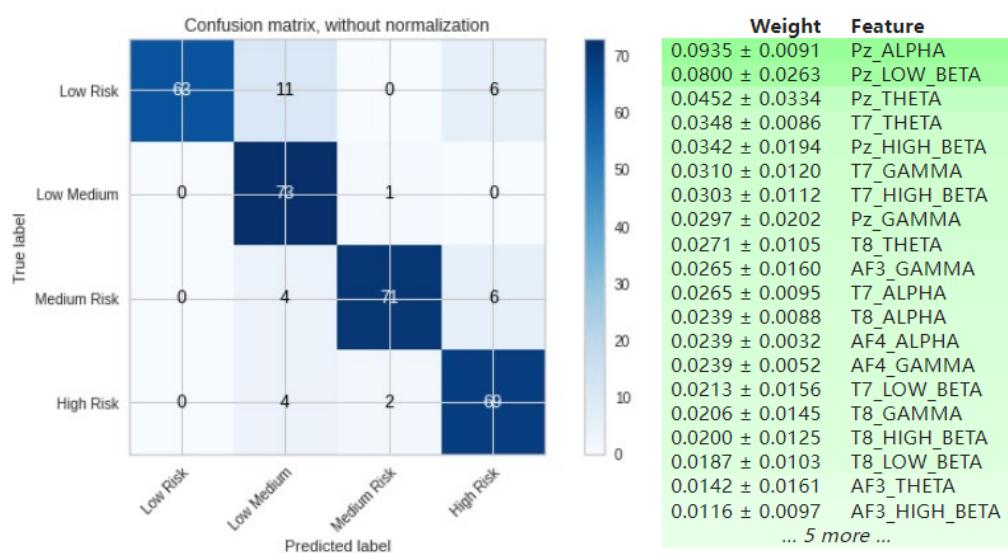
Local explanation for class Low Medium

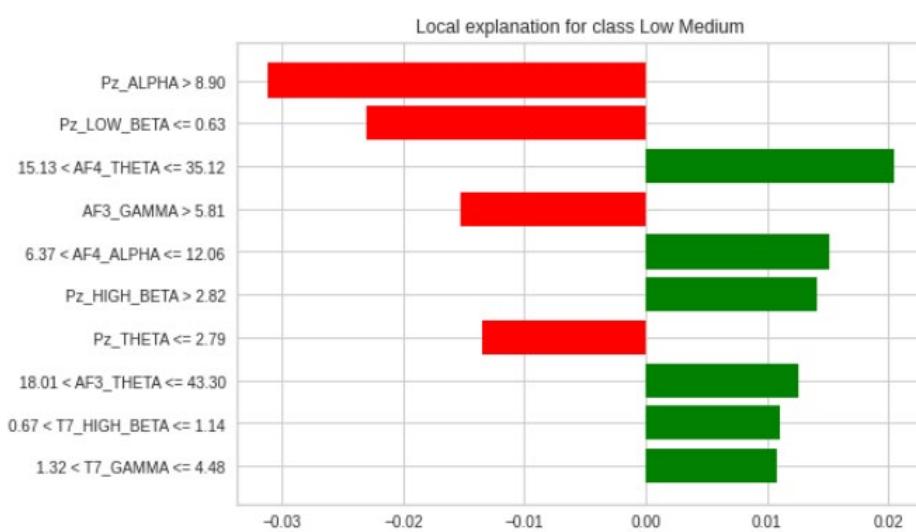
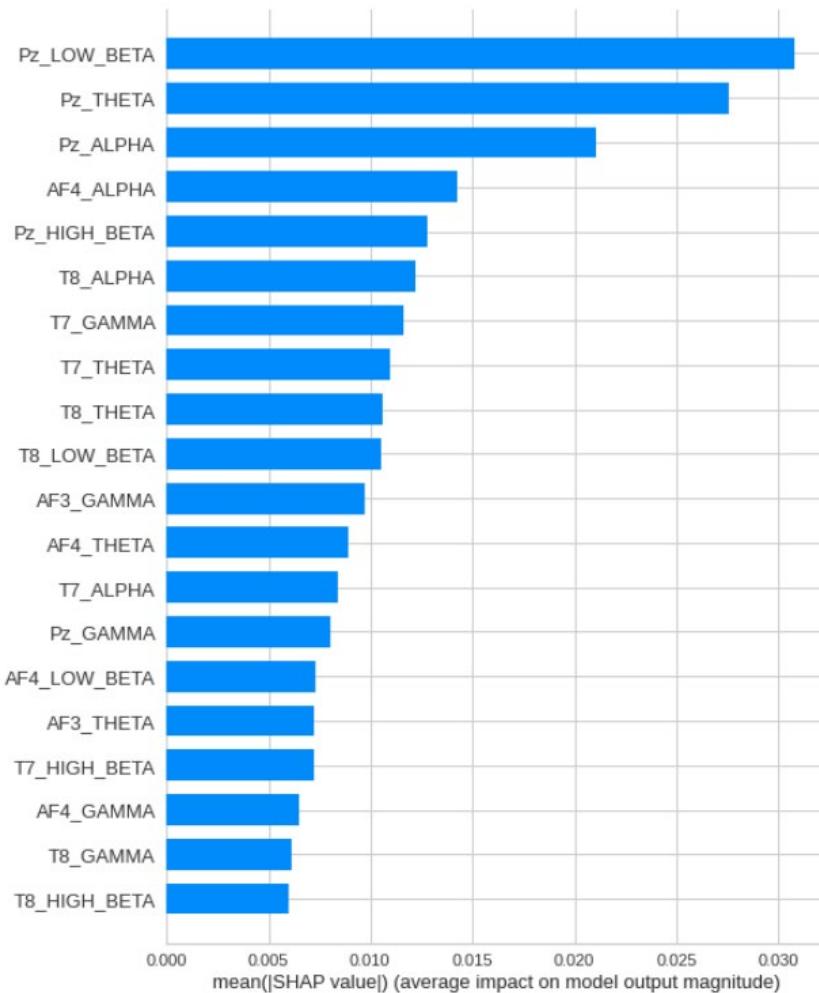


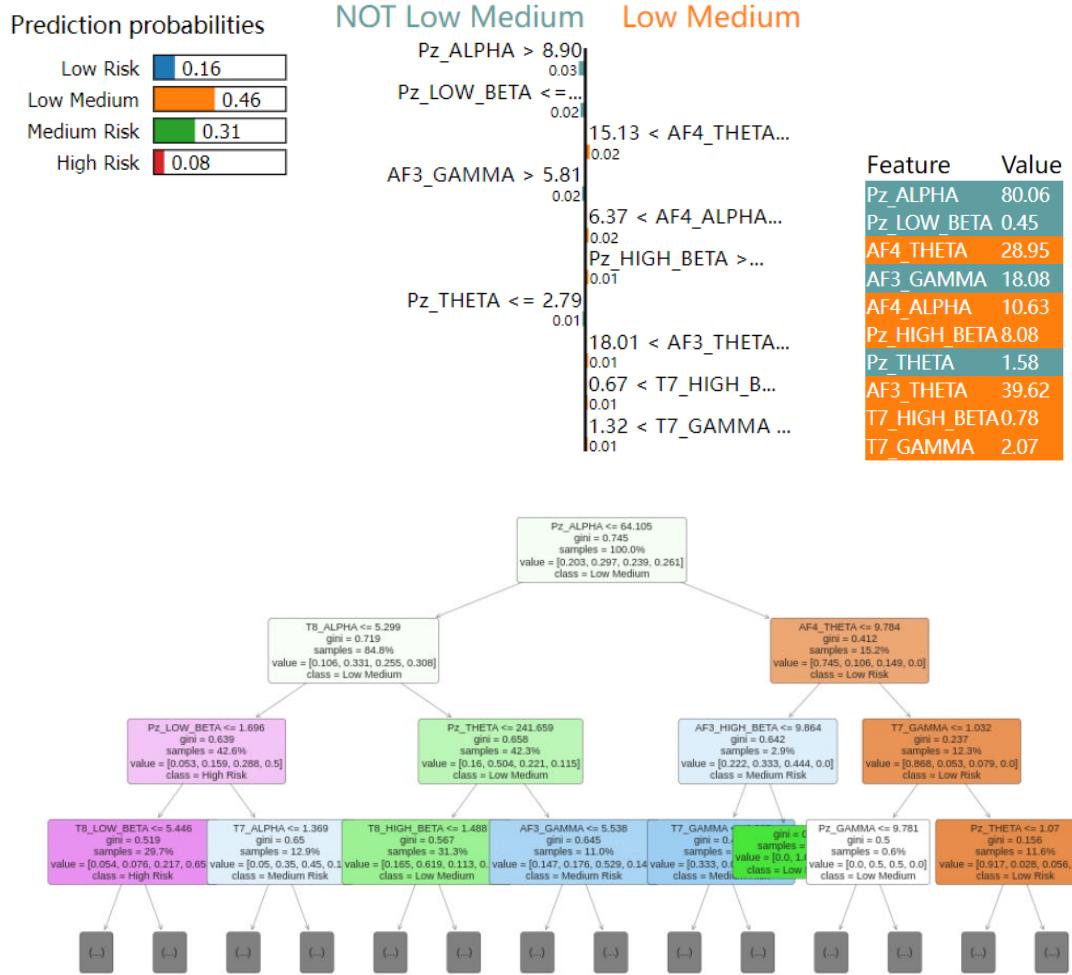


Random Forest:

1 Poisoning rate 5%:

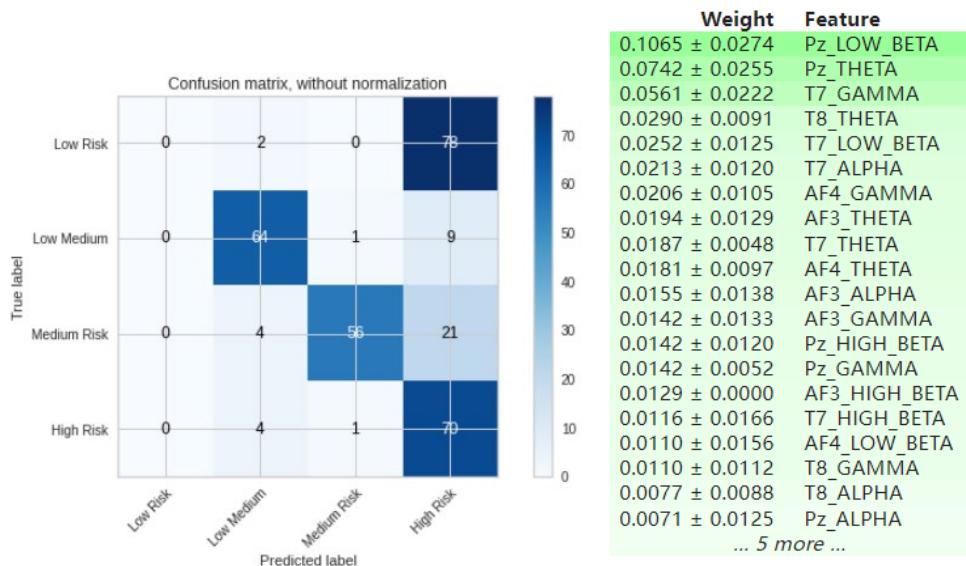


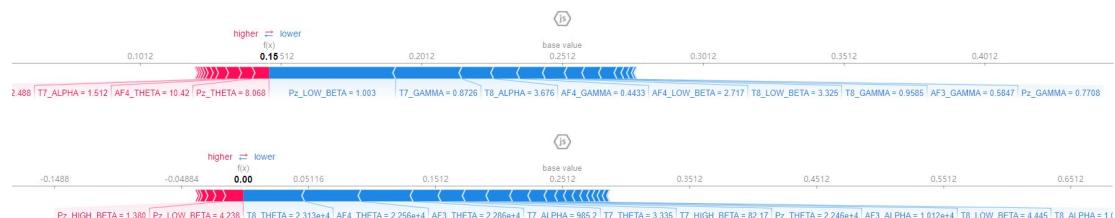
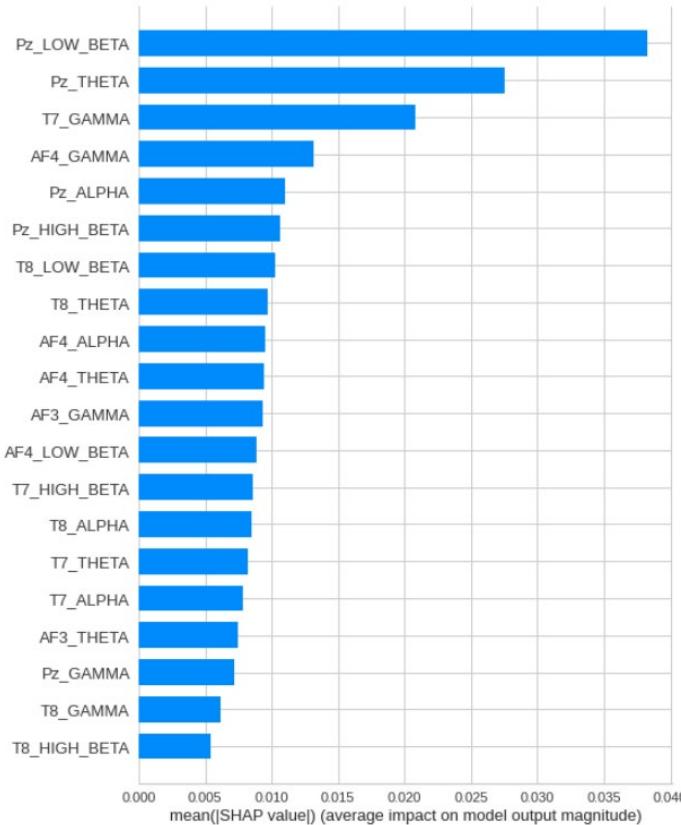


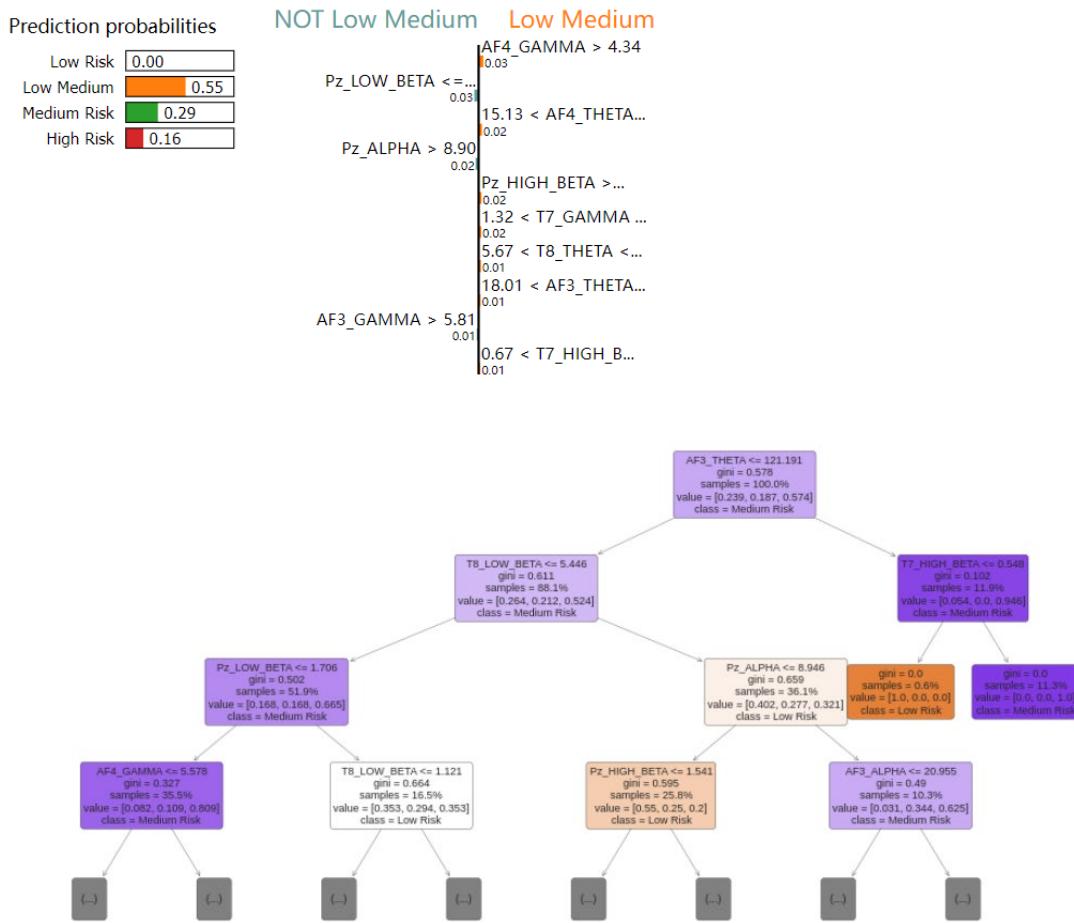


Random Forest:

1 Poisoning rate 25%:

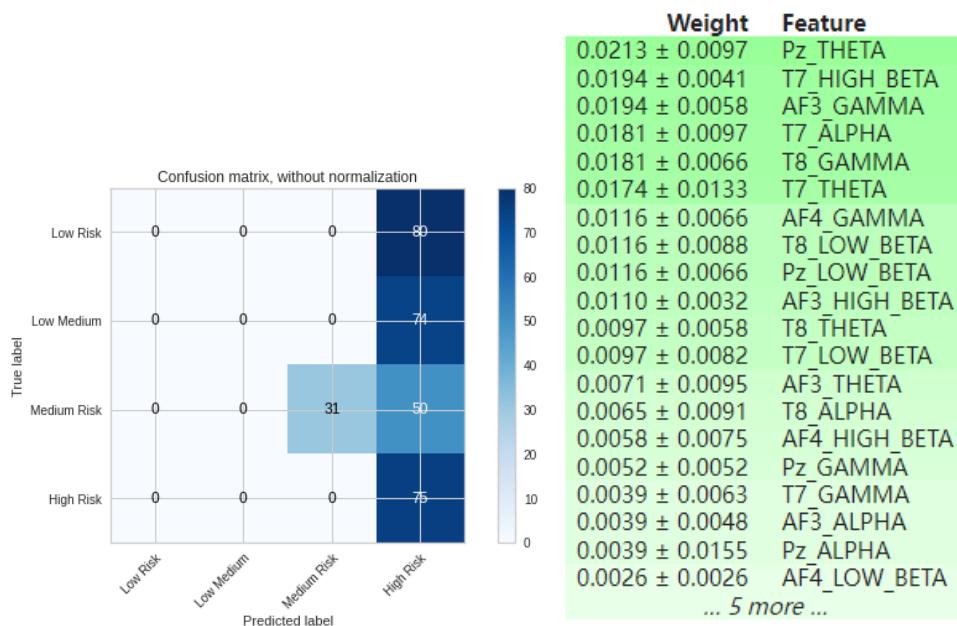


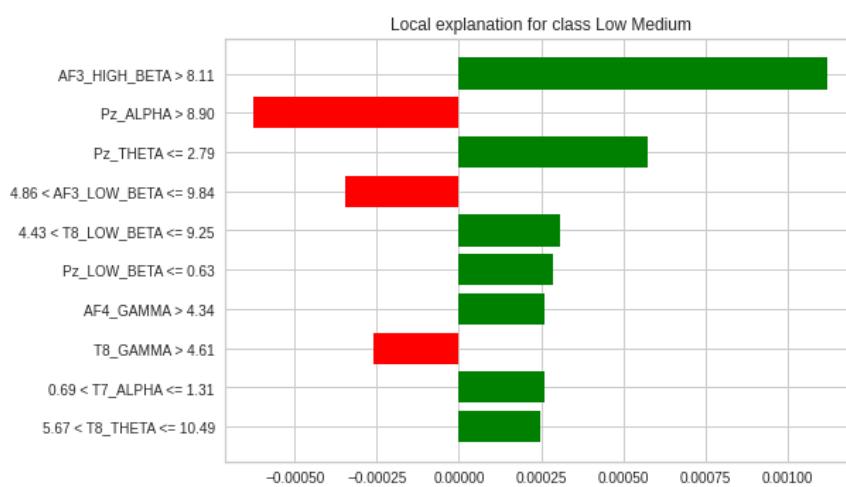
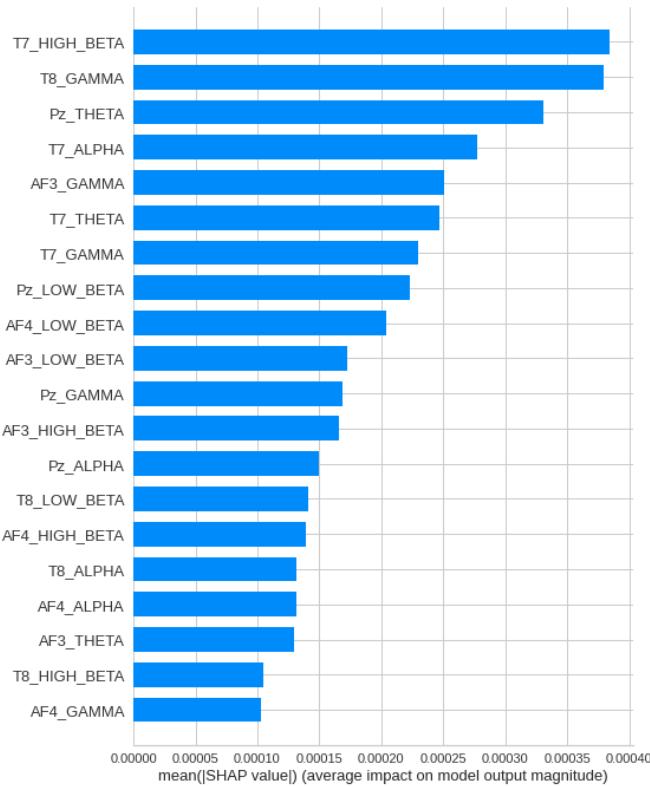


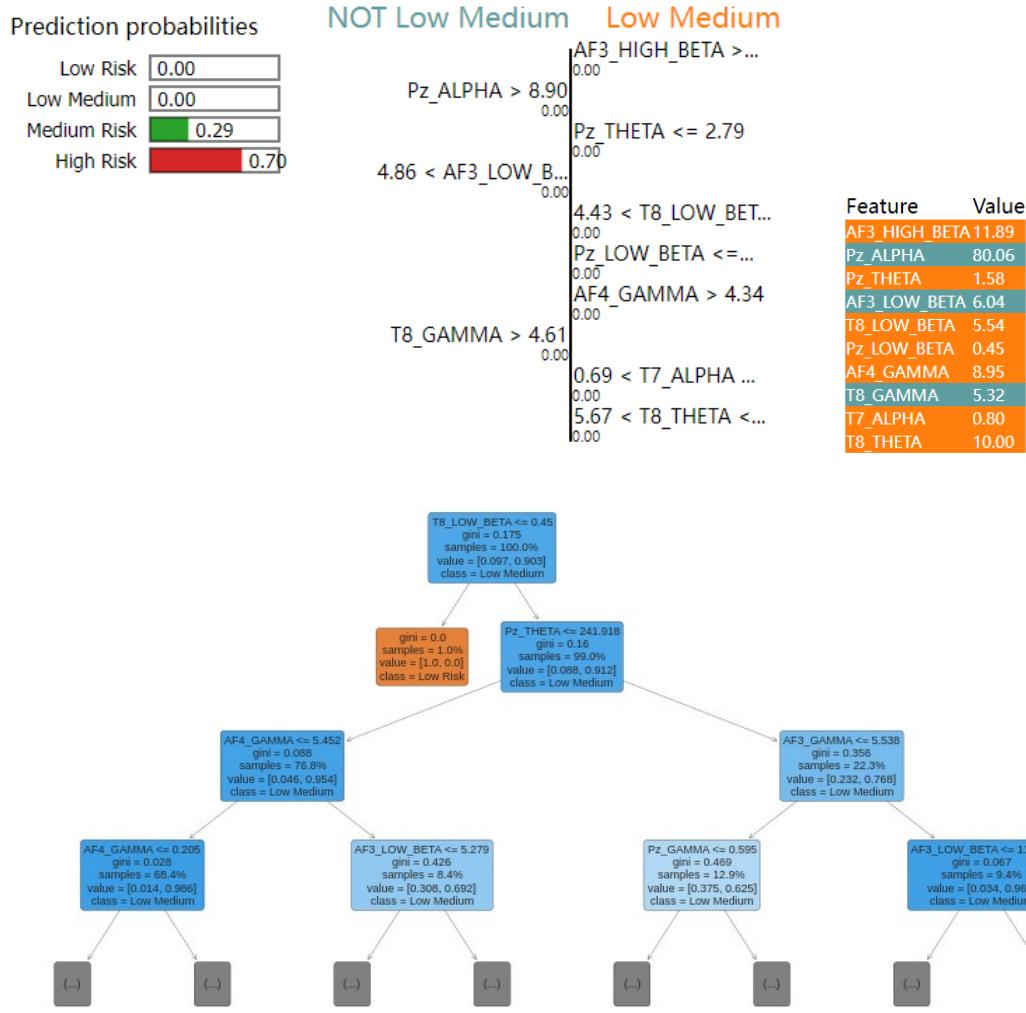


Random Forest:

1 Poisoning rate 50%:

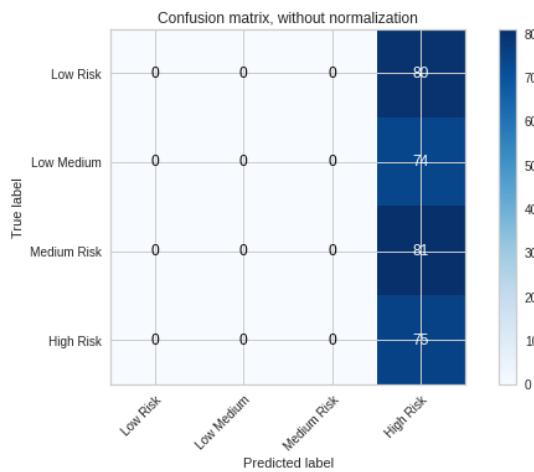






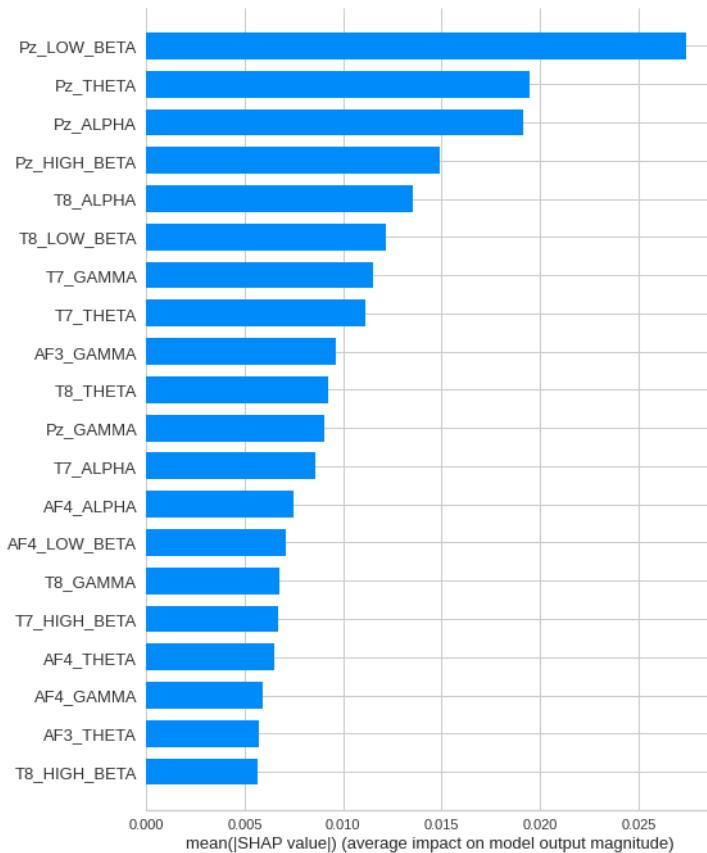
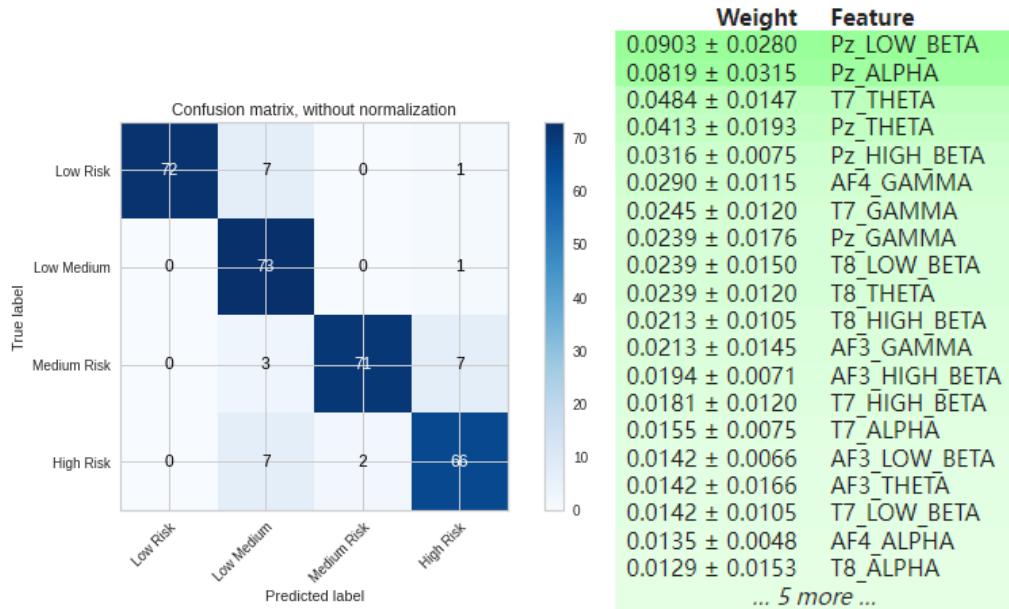
Random Forest:

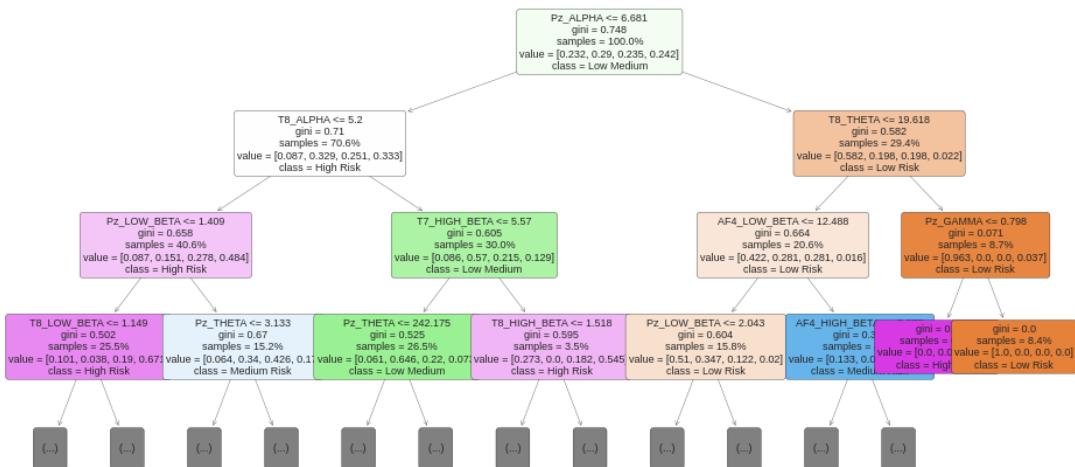
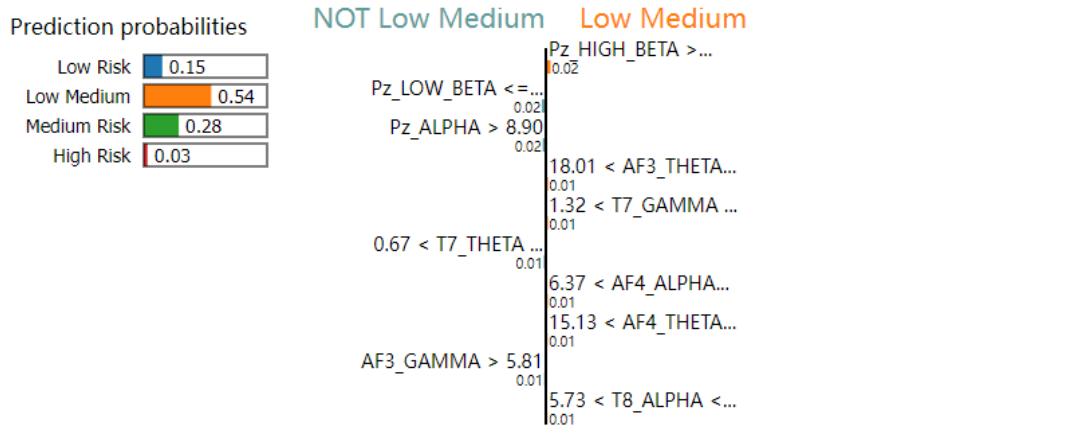
1 Poisoning rate 75%:



Random Forest:

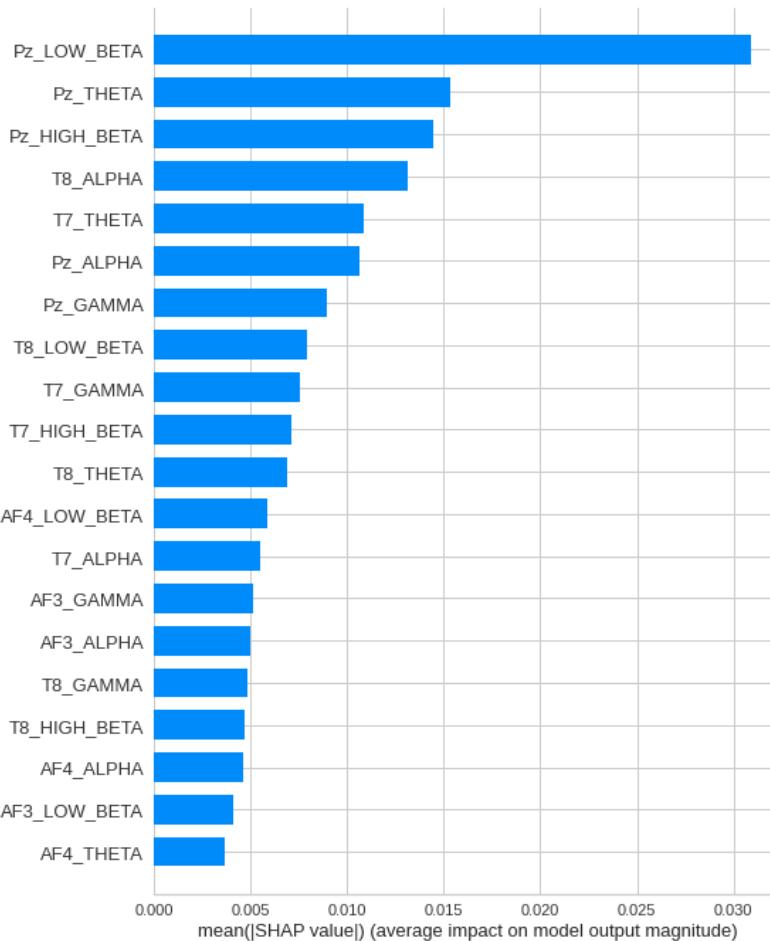
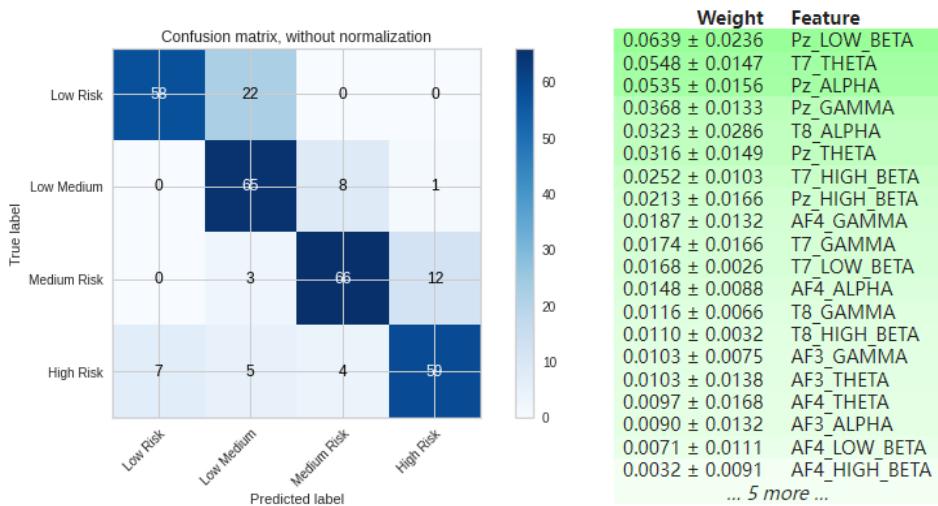
2 Poisoning rate 5%:

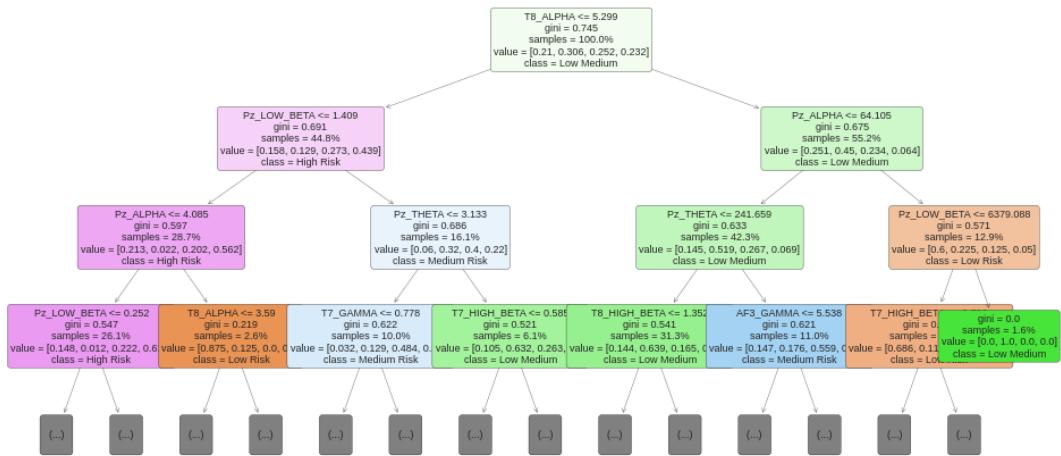
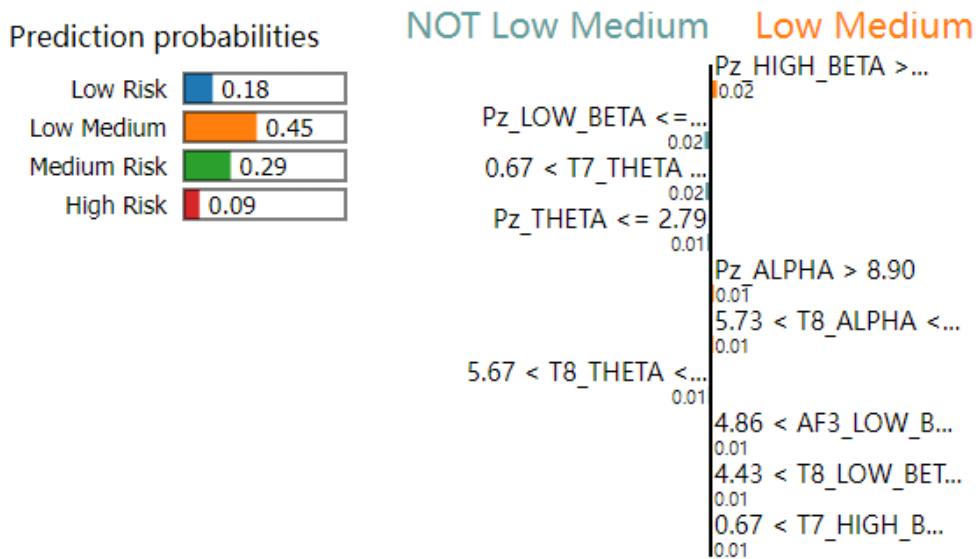
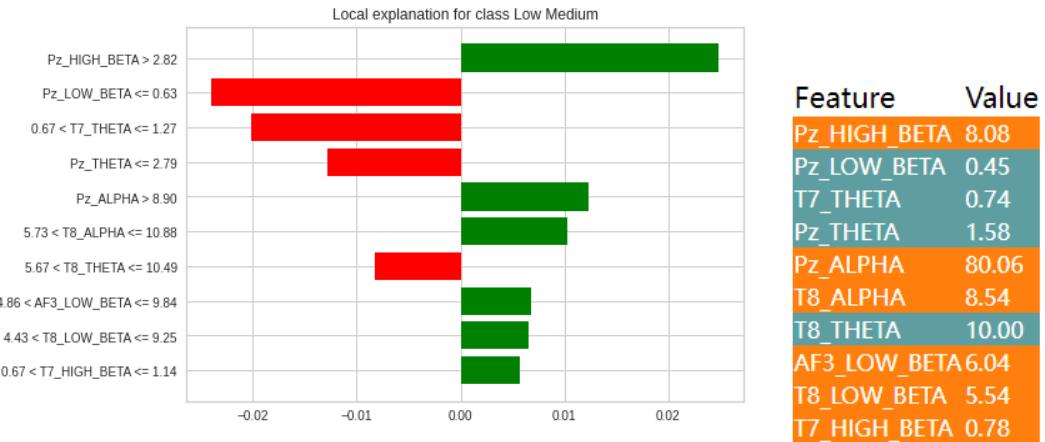




Random Forest:

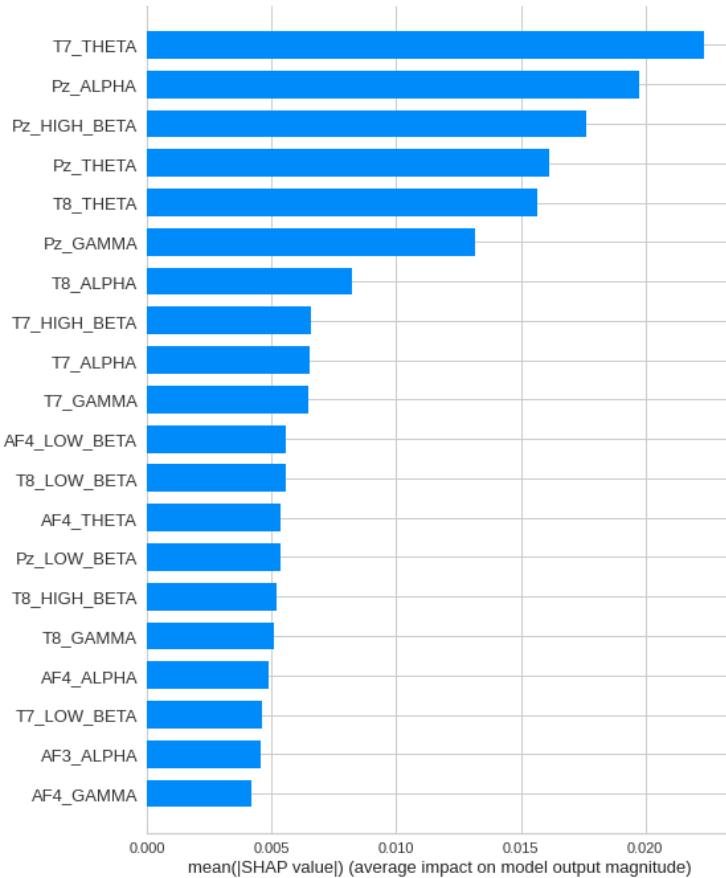
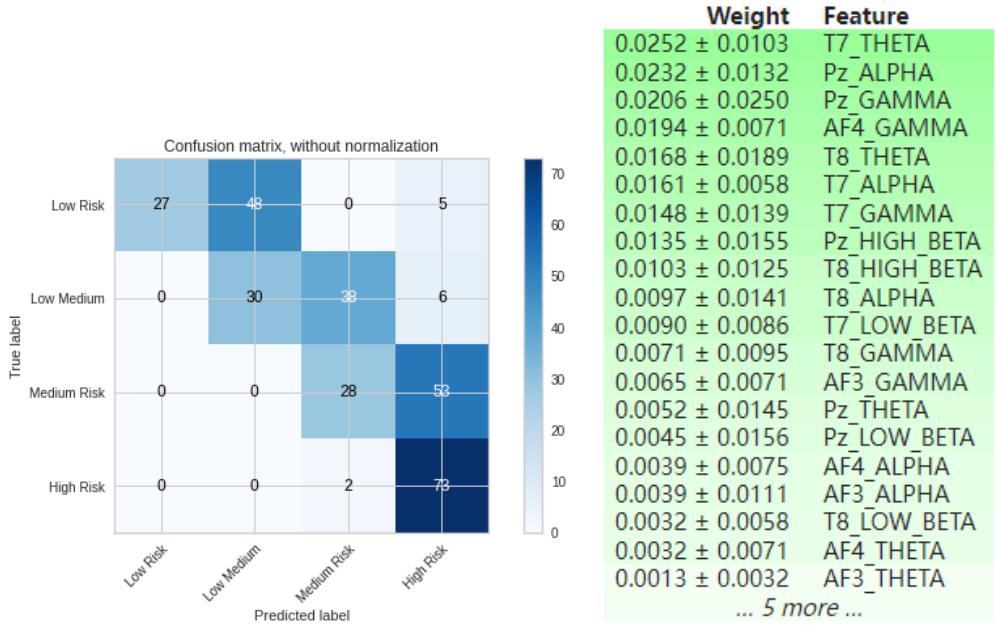
2 Poisoning rate 25%:

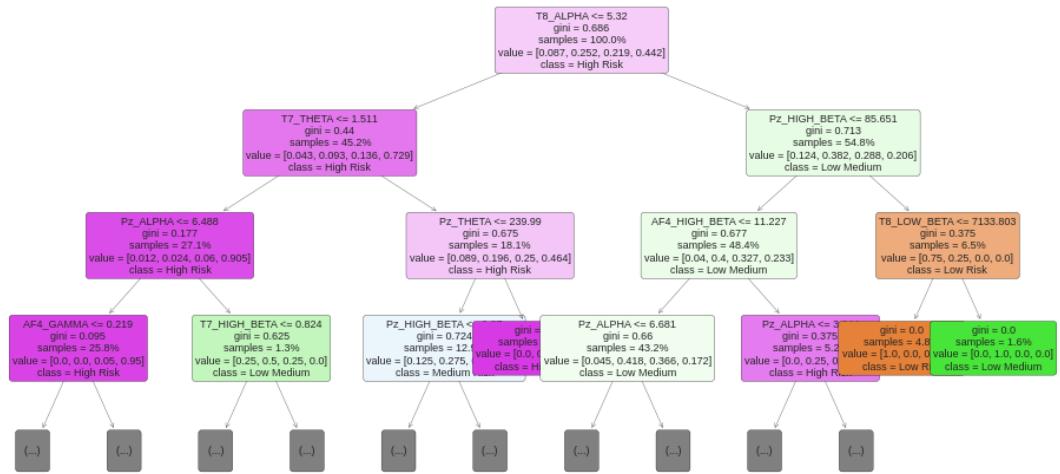
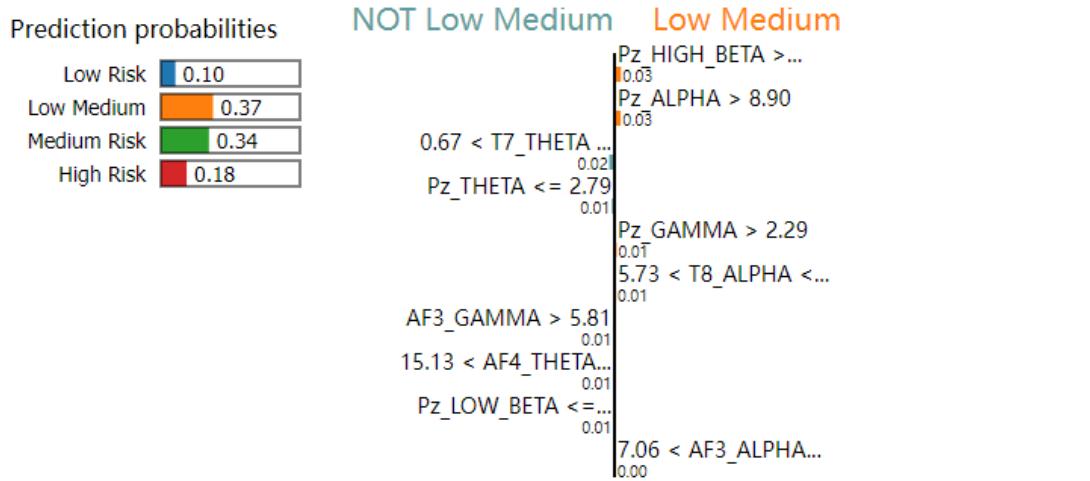
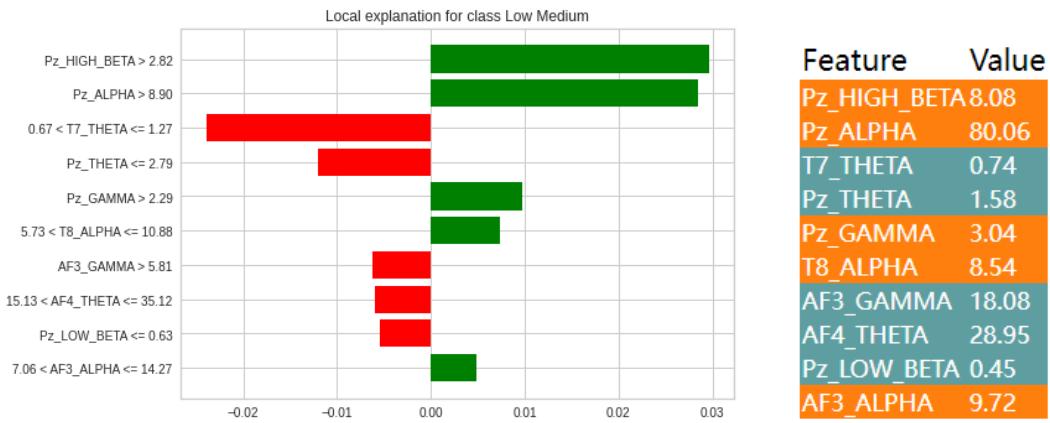




Random Forest:

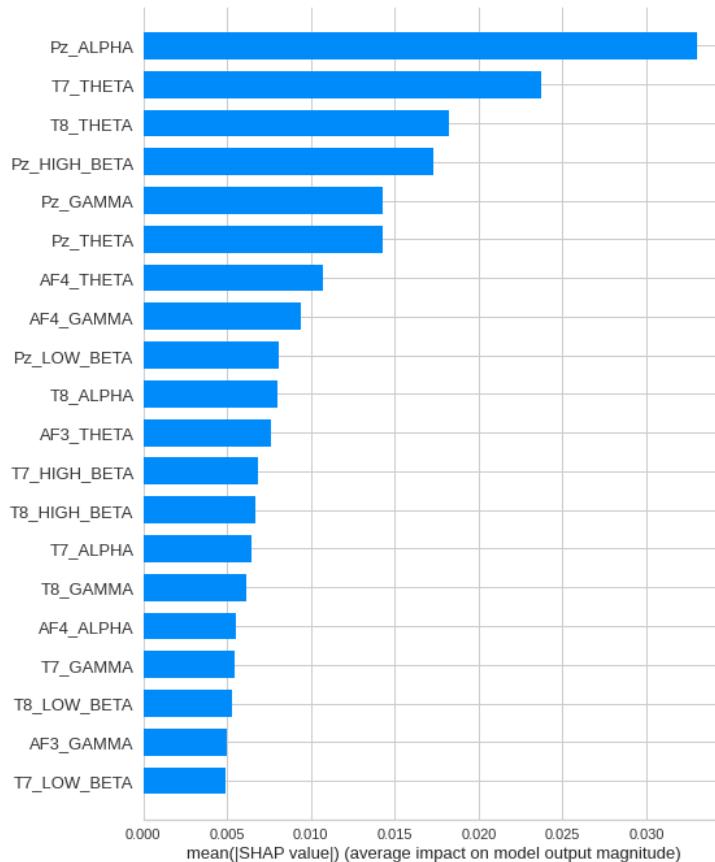
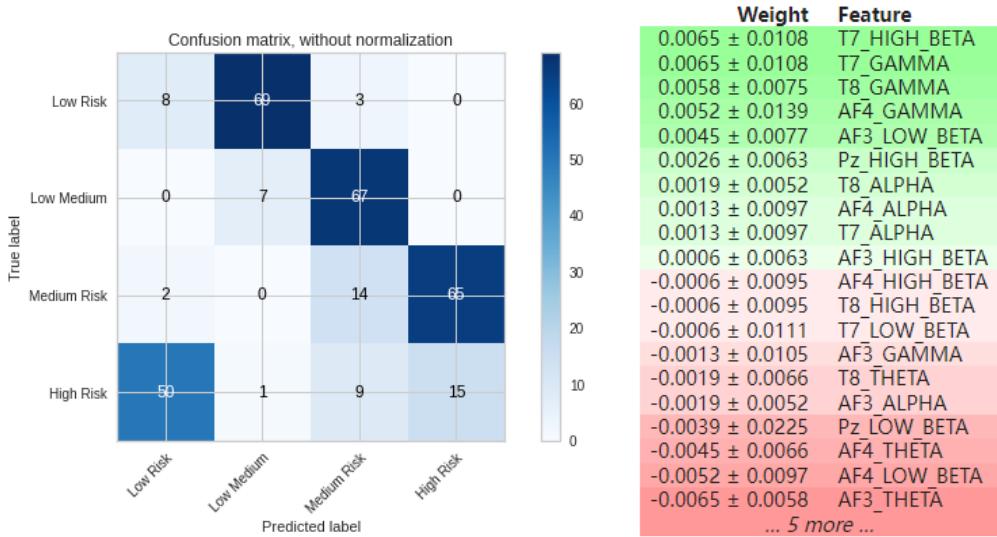
2 Poisoning rate 50%:

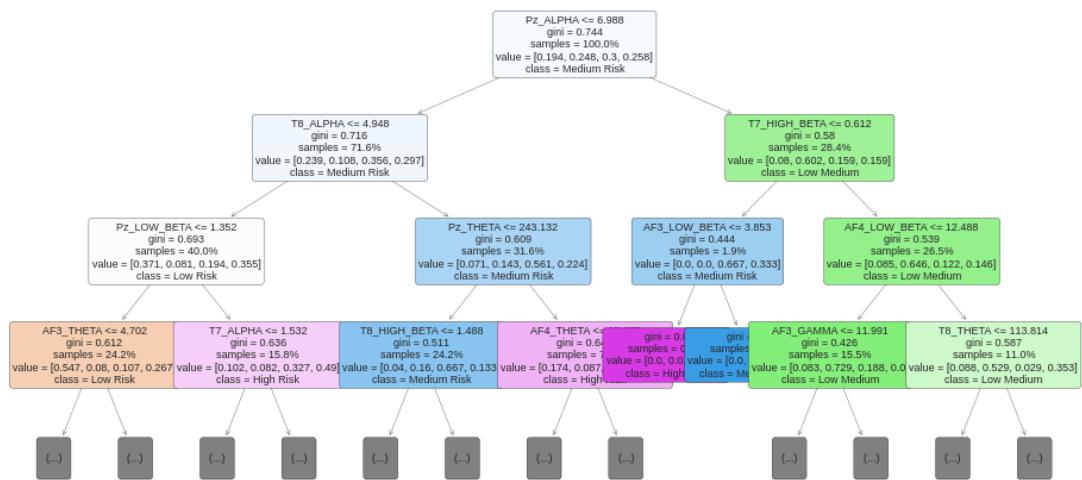
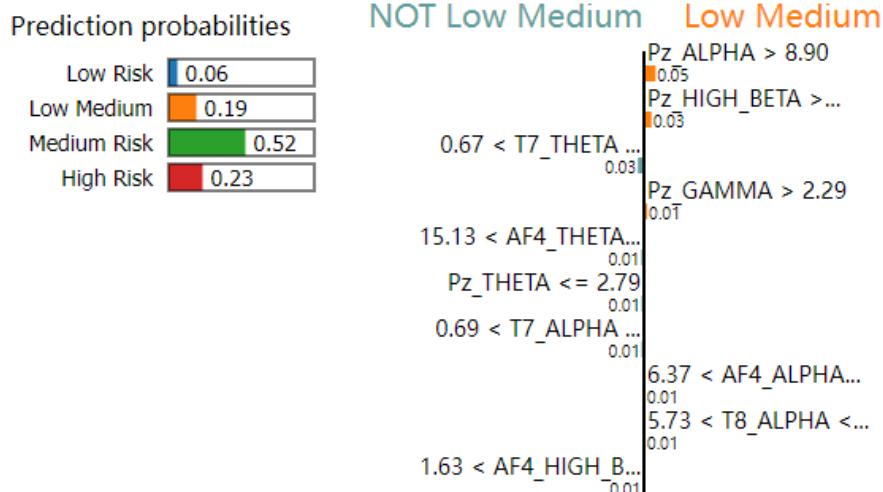
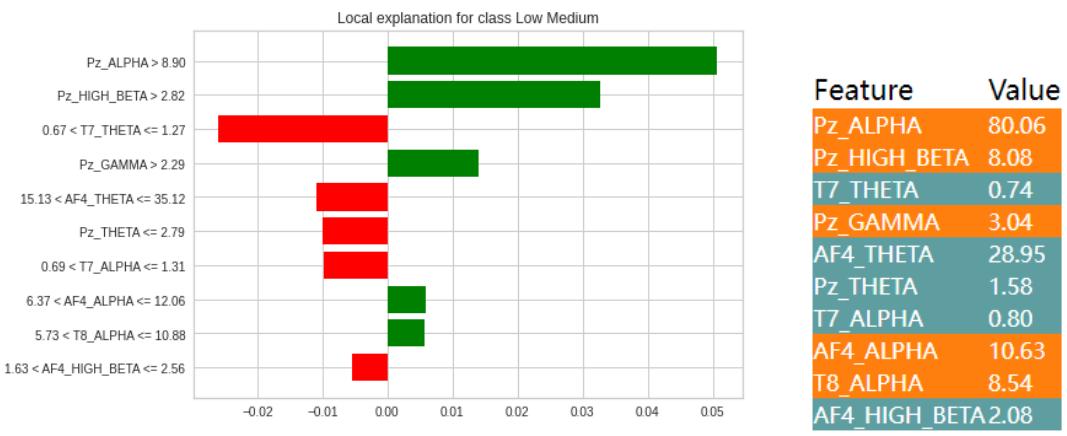




Random Forest:

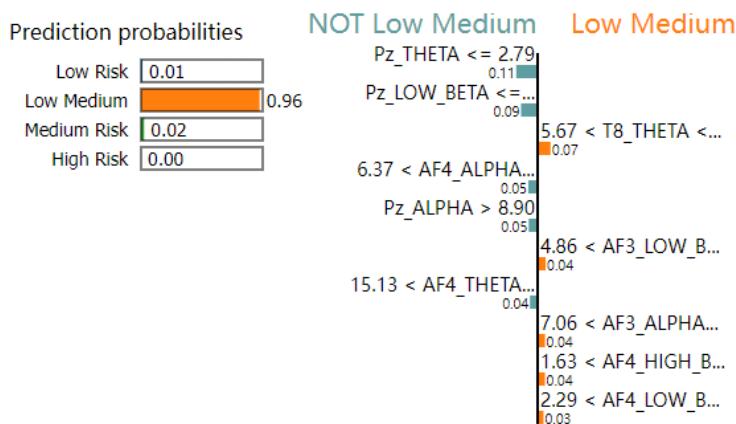
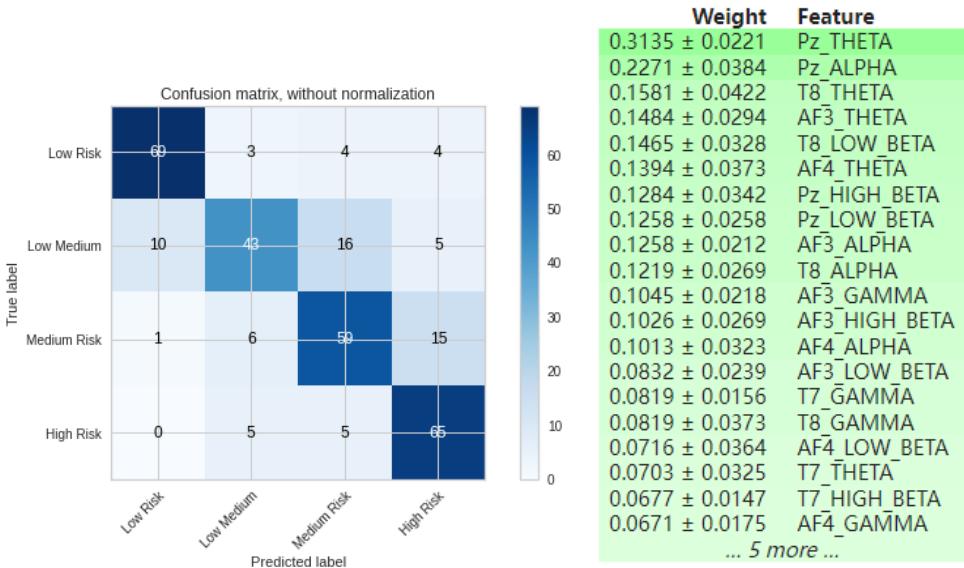
2 Poisoning rate 75%:

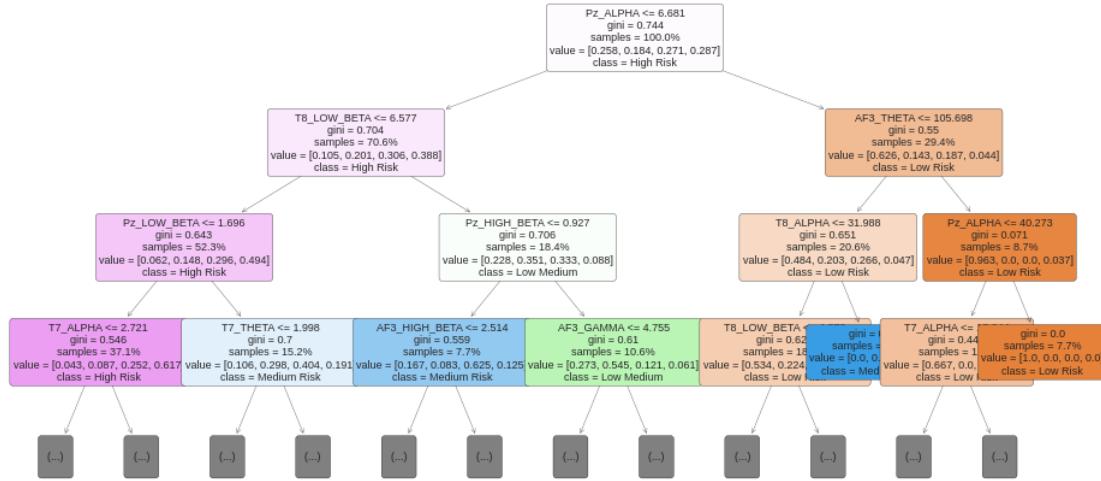




MLP:

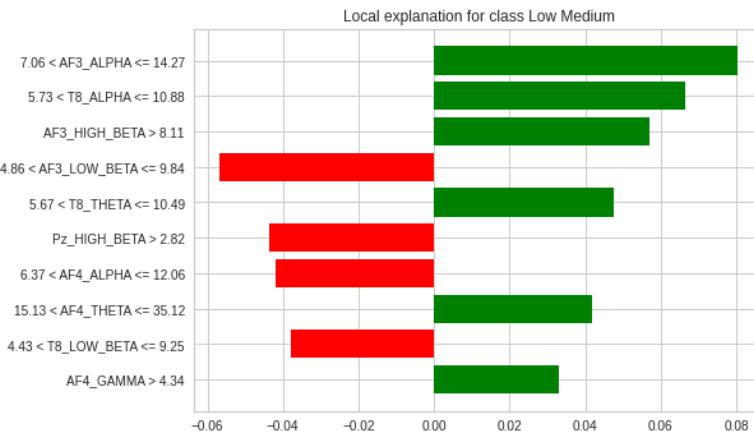
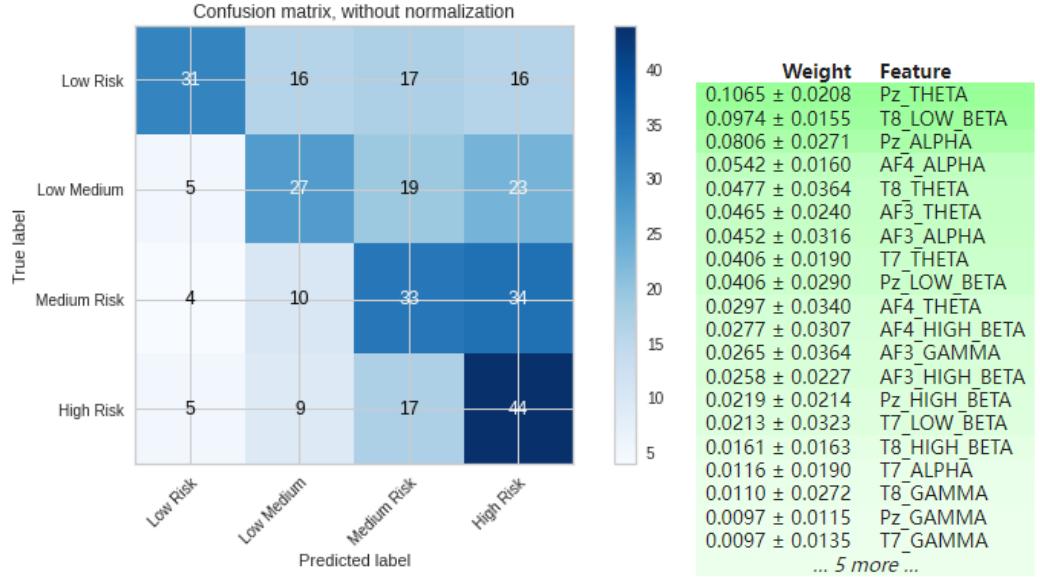
2 Poisoning rate 0%:

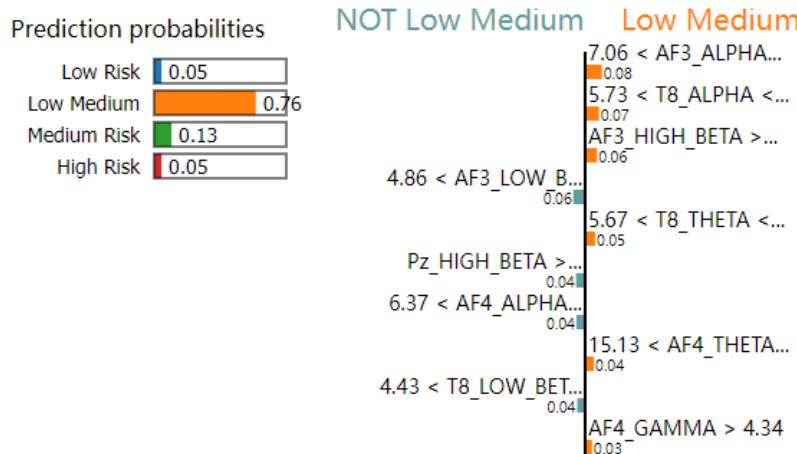
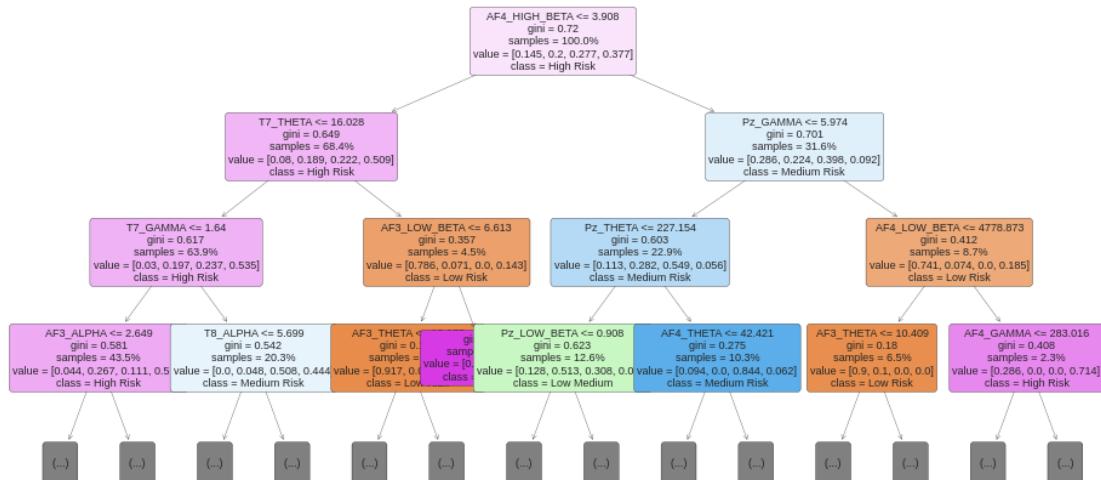




MLP:

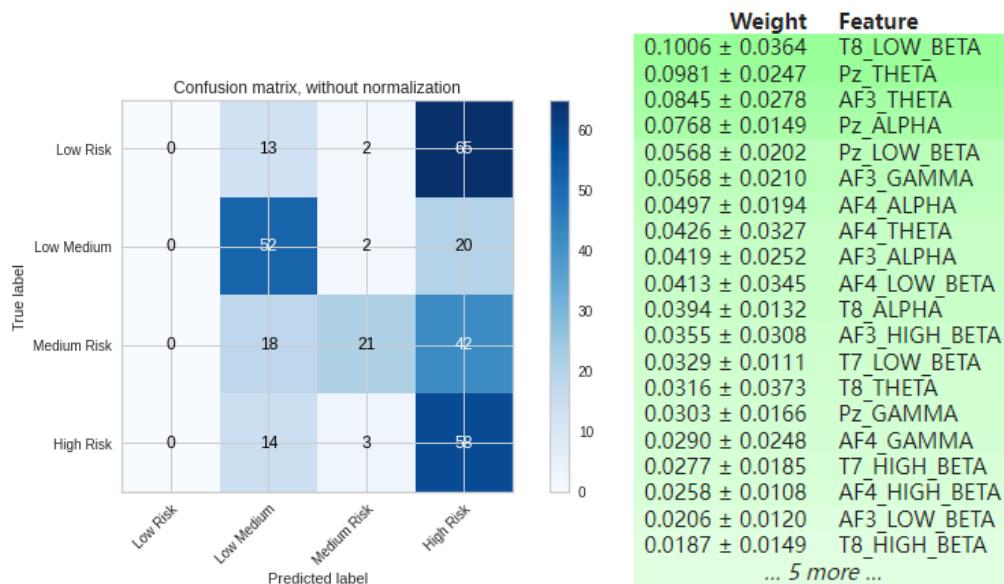
1 Poisoning rate 5%:

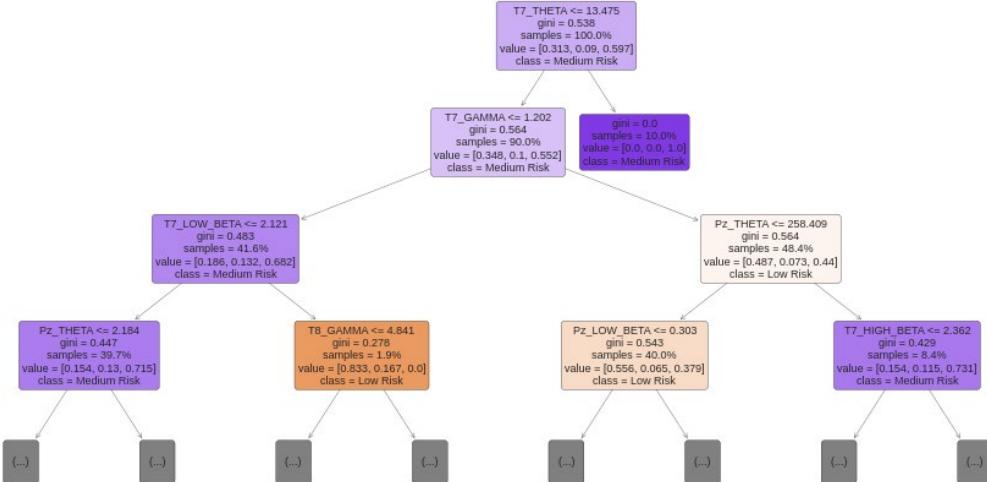
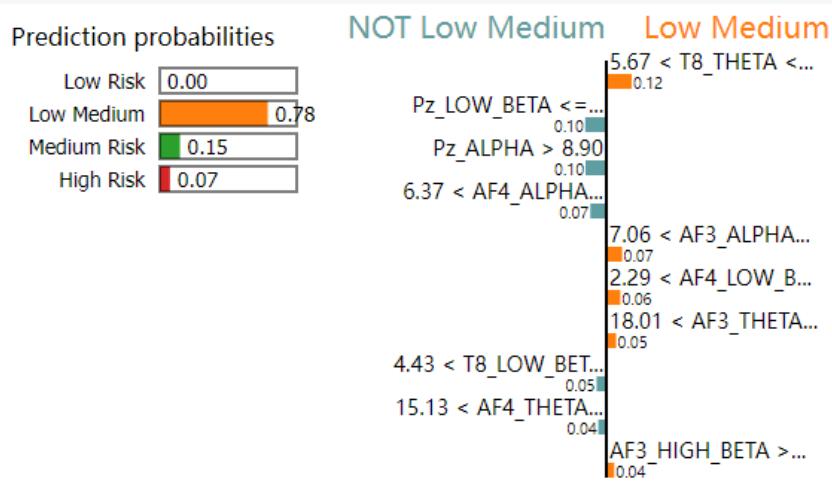
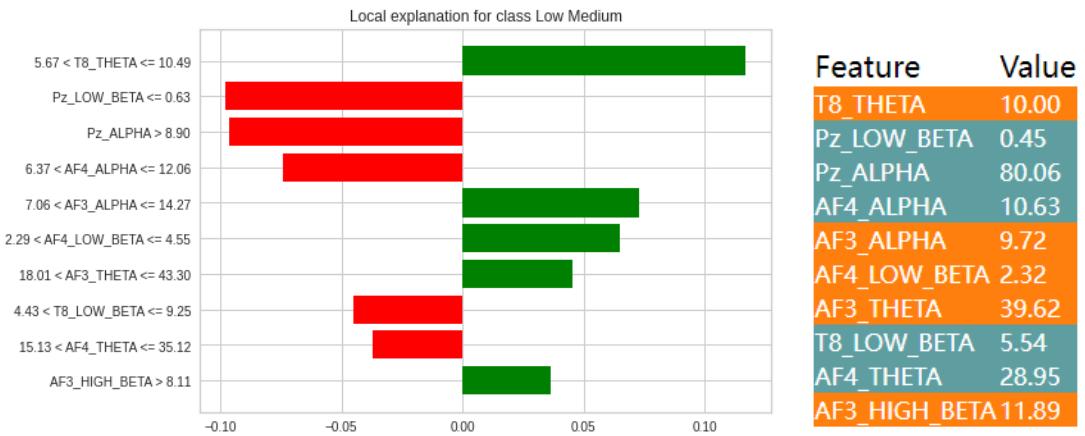




MLP:

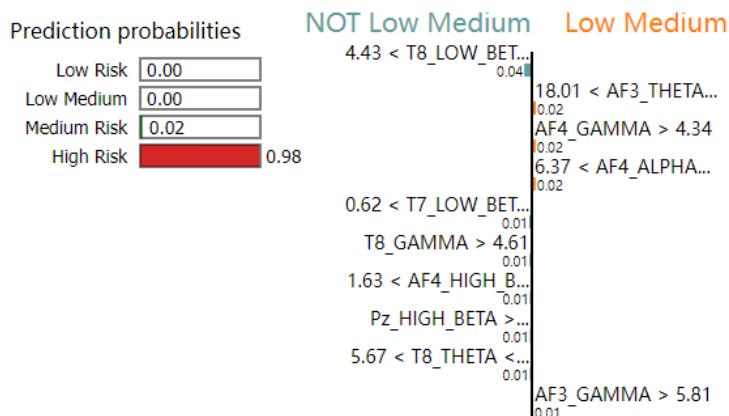
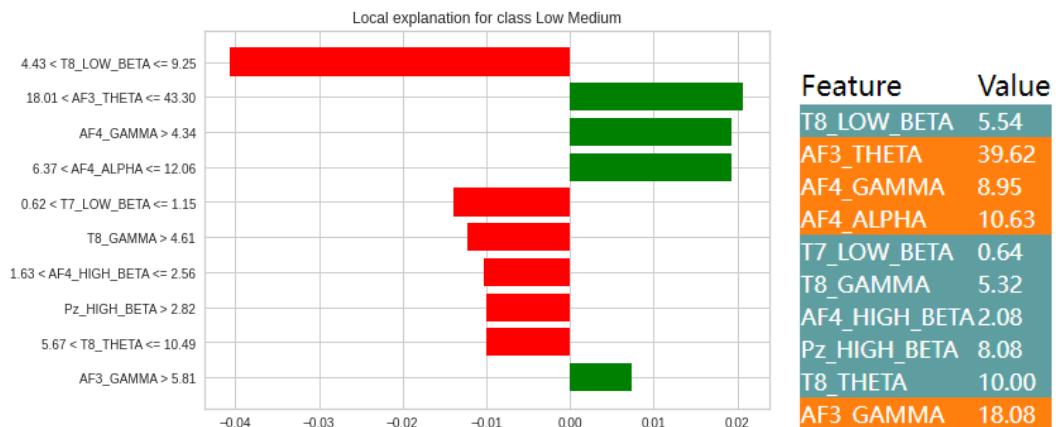
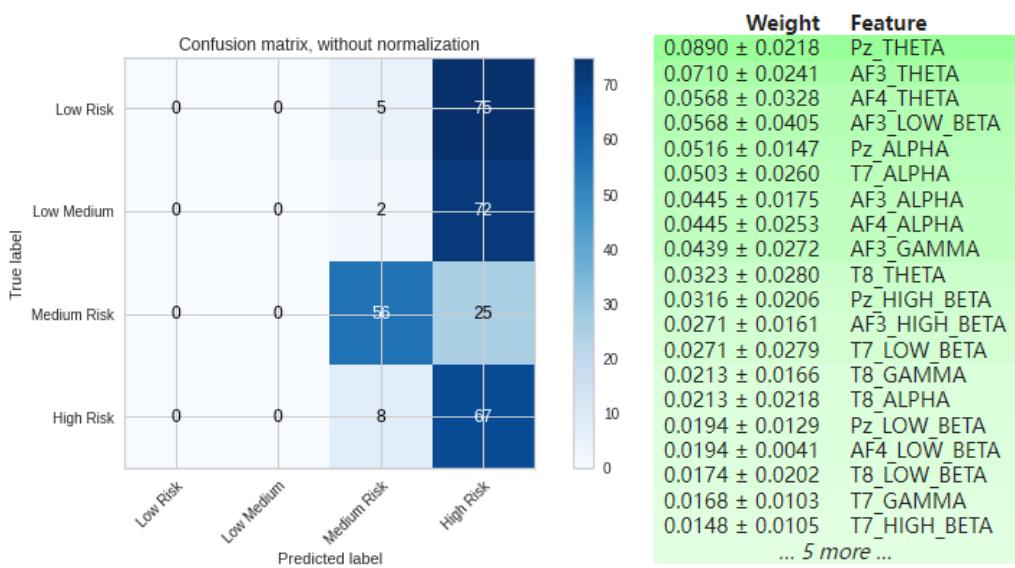
1 Poisoning rate 25%:

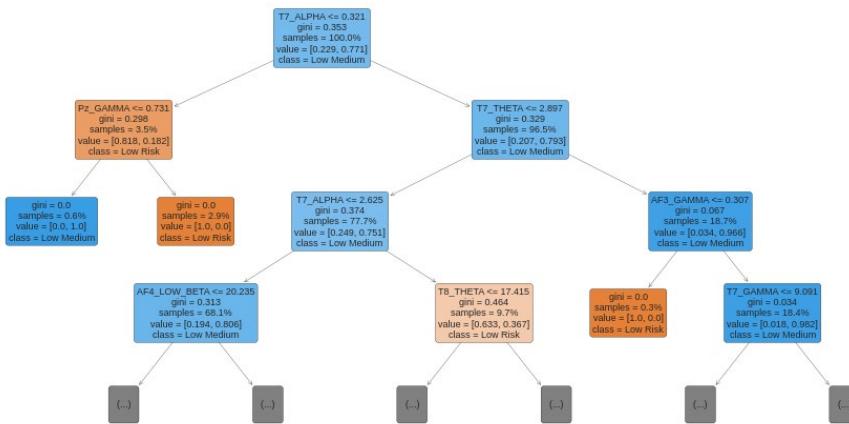




MLP:

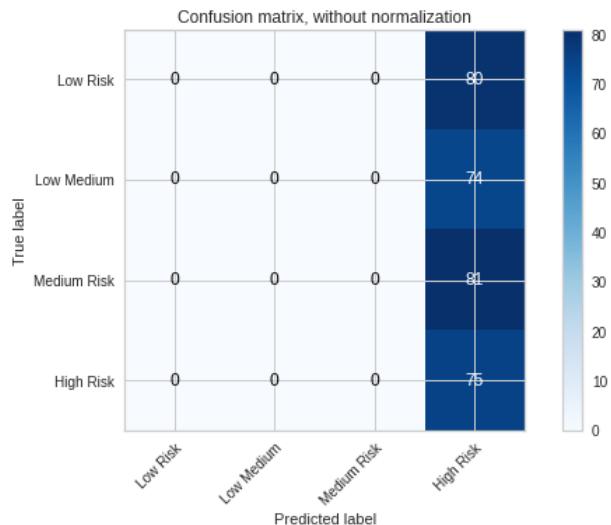
1 Poisoning rate 50%:





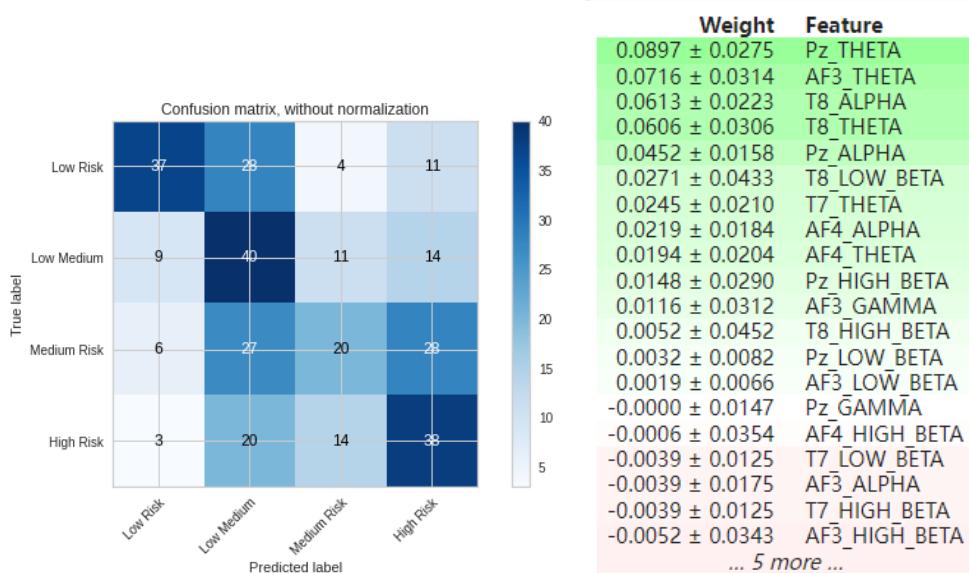
MLP:

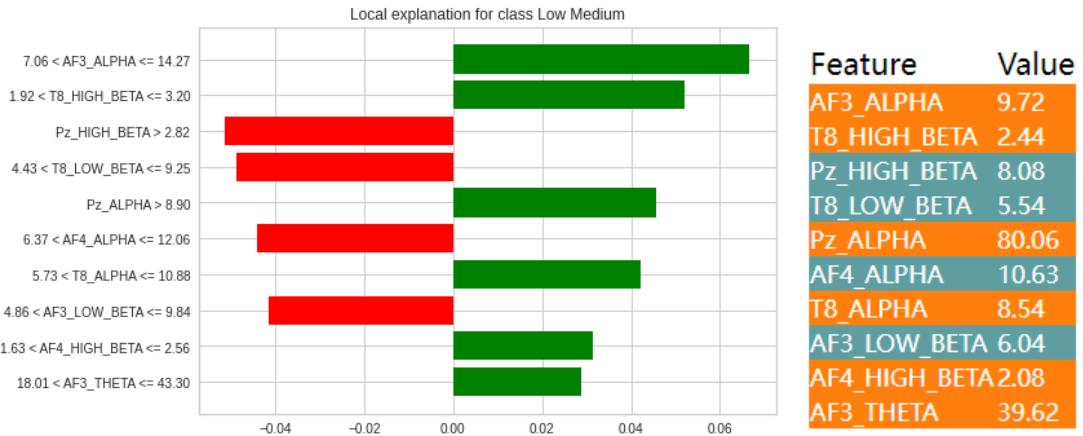
1 Poisoning rate 75%:



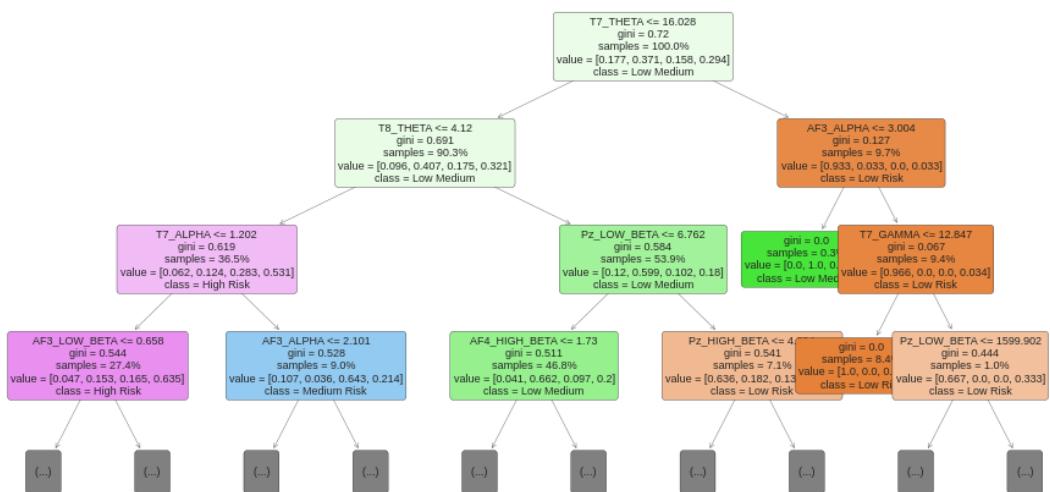
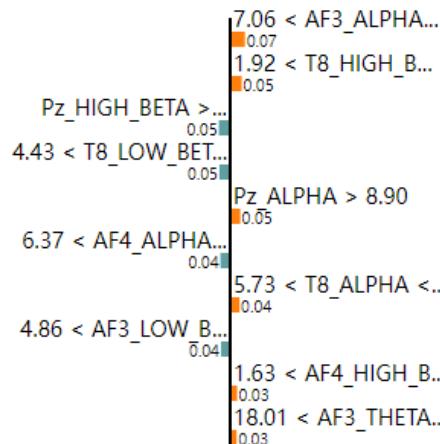
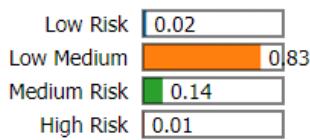
MLP:

2 Poisoning rate 5%:



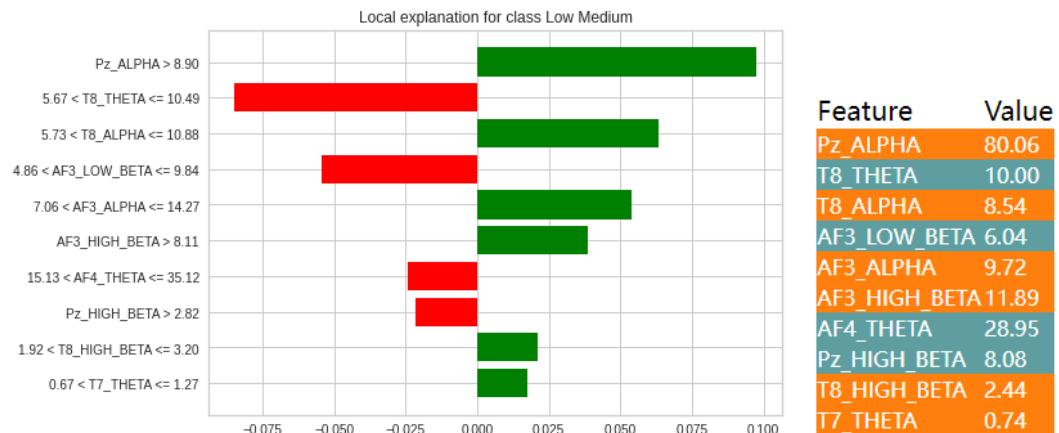
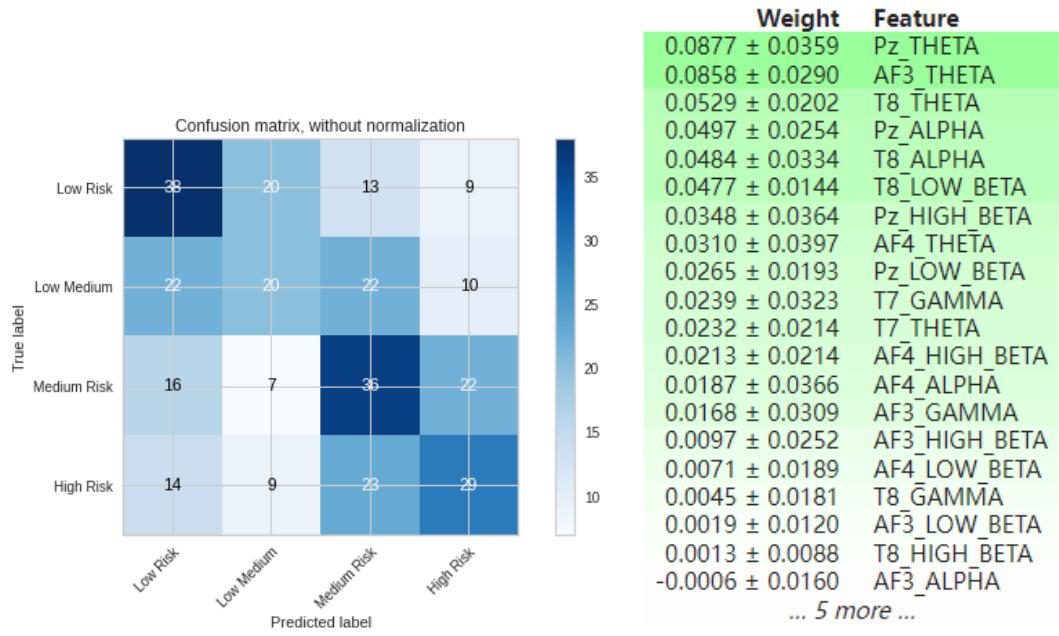


Prediction probabilities NOT Low Medium Low Medium



MLP:

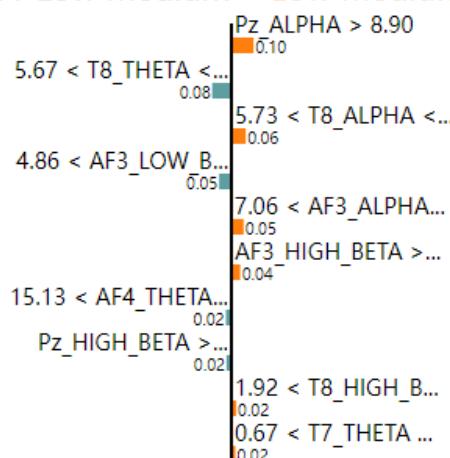
2 Poisoning rate 25%:

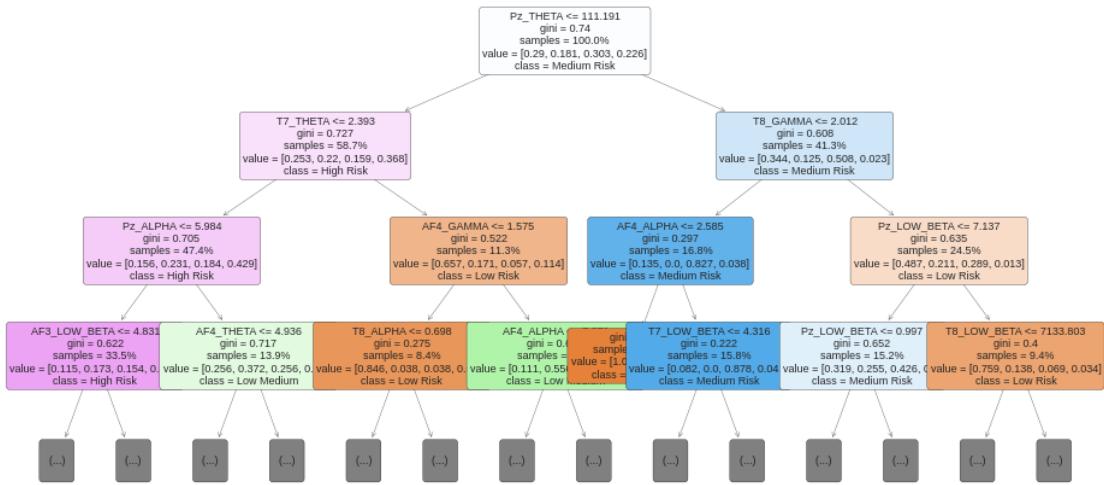


Prediction probabilities

Low Risk	0.06
Low Medium	0.74
Medium Risk	0.17
High Risk	0.03

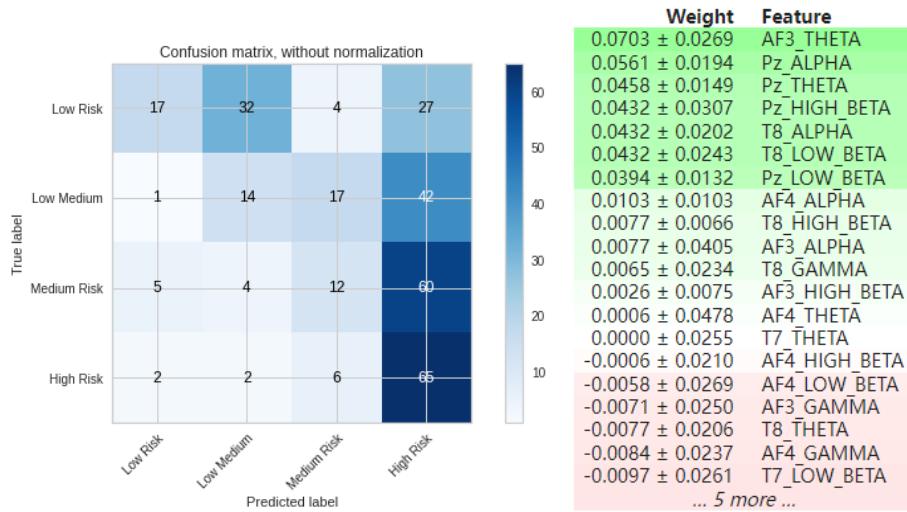
NOT Low Medium Low Medium

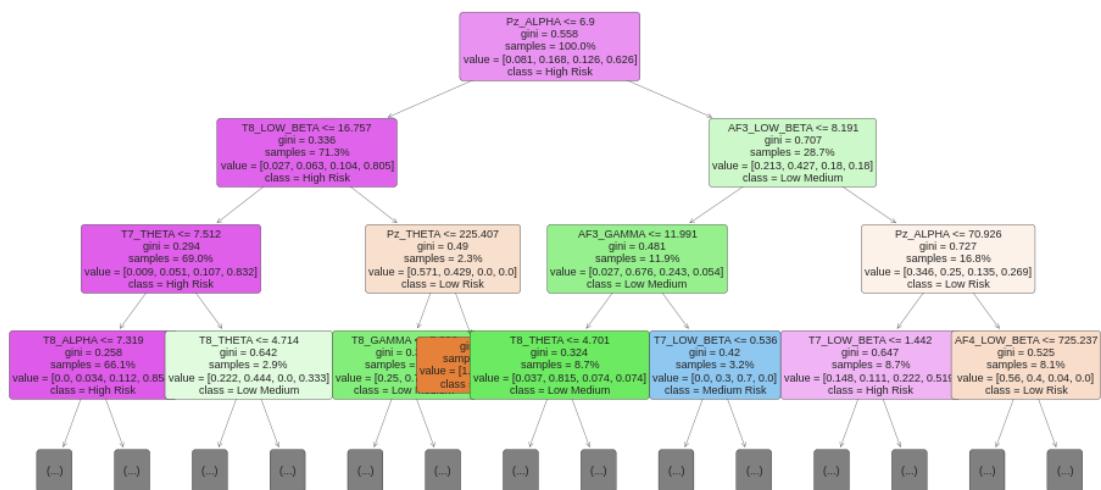
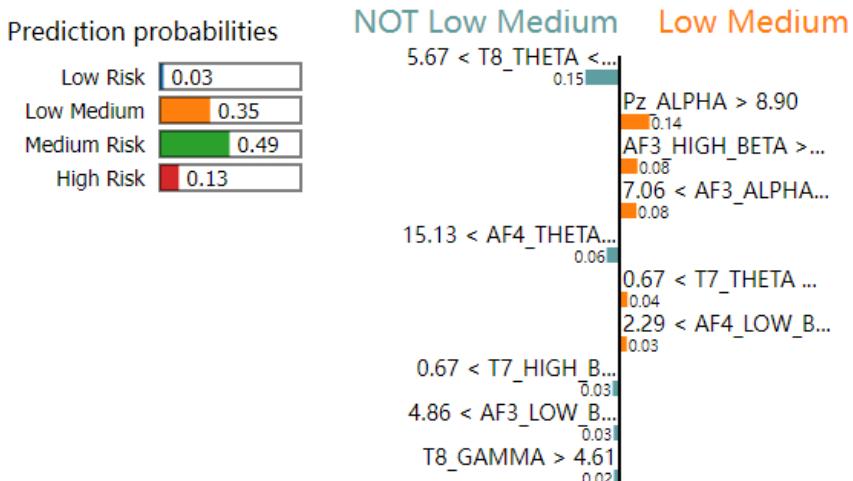




MLP:

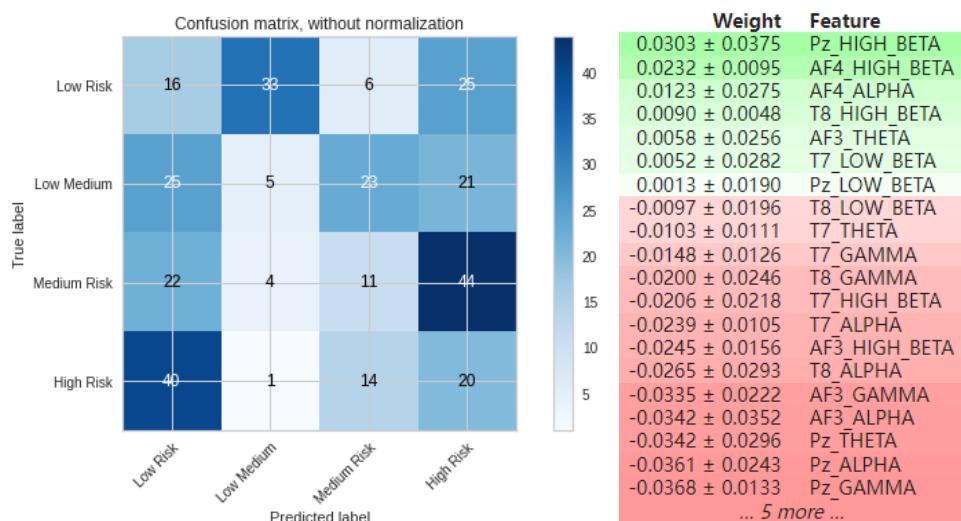
2 Poisoning rate 50%:

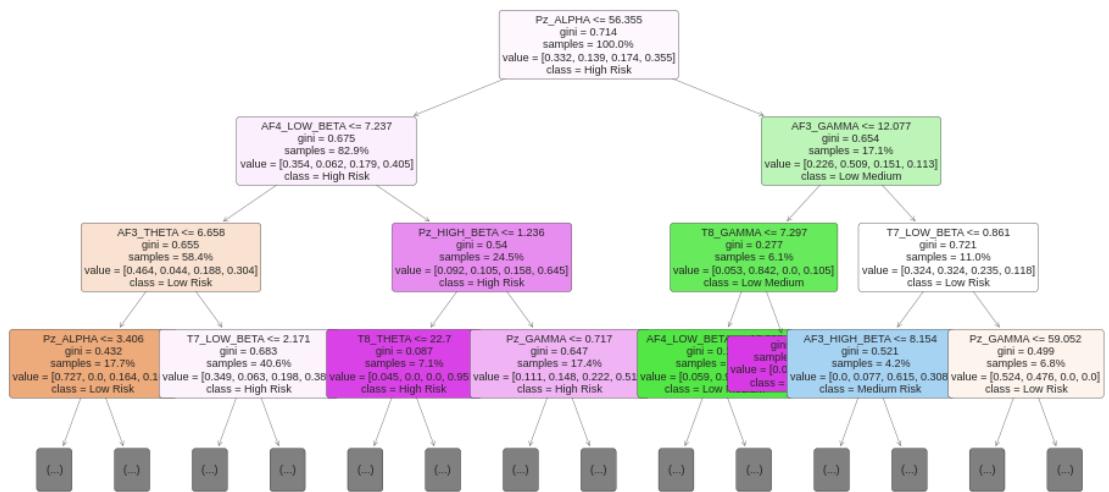
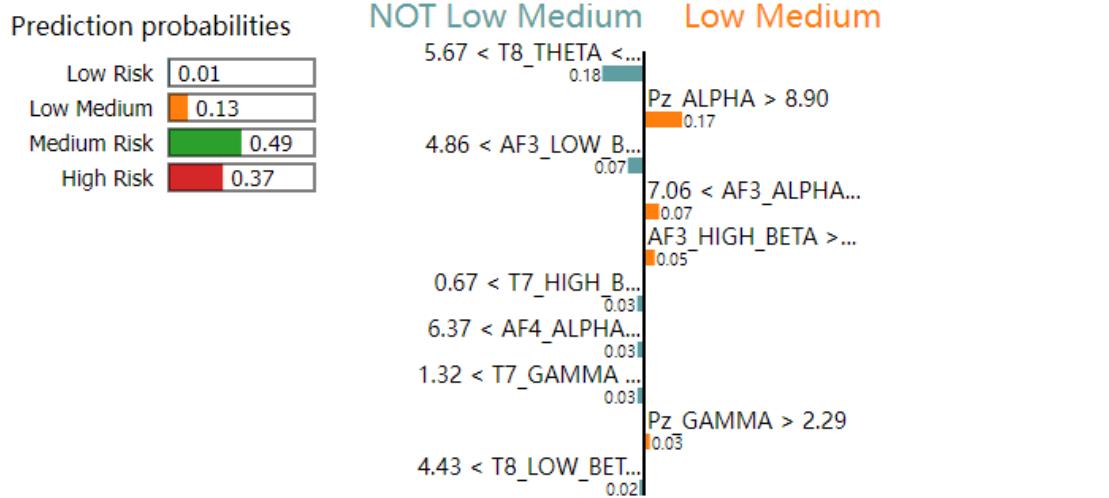
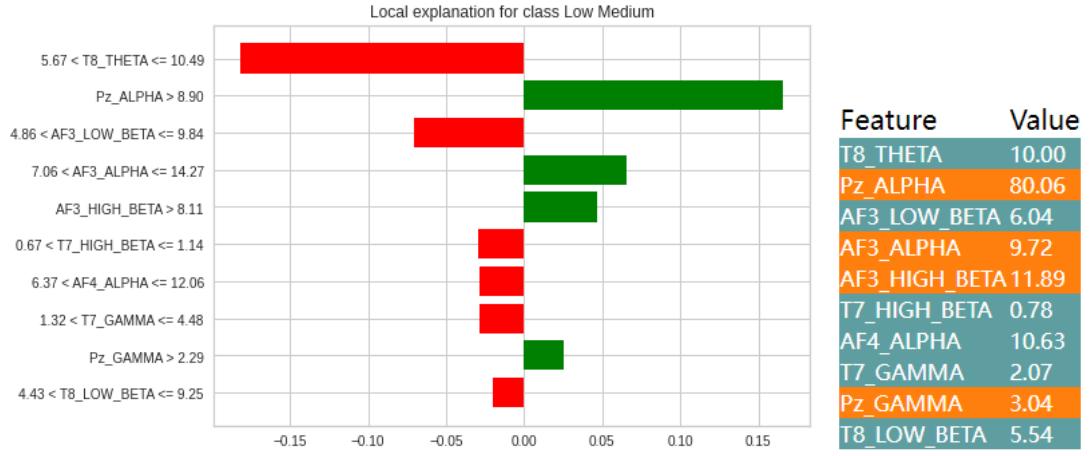




MLP:

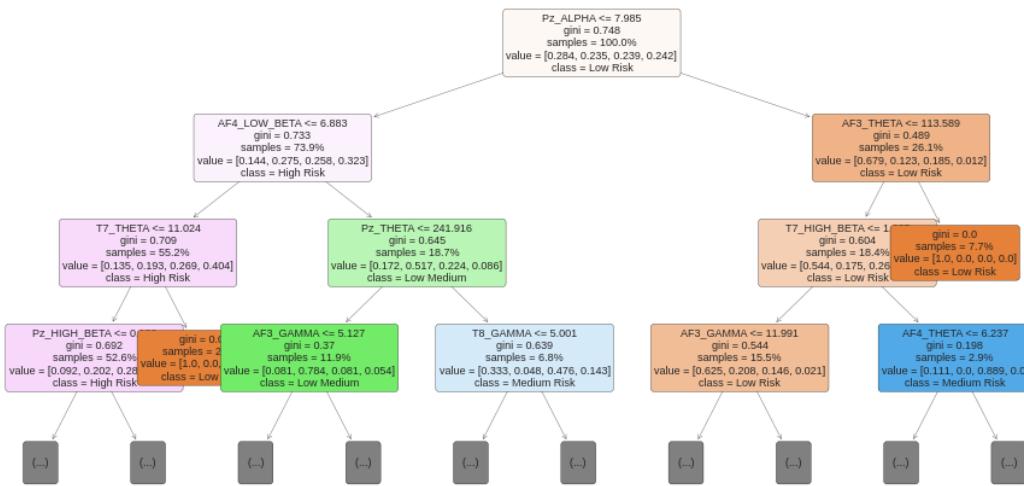
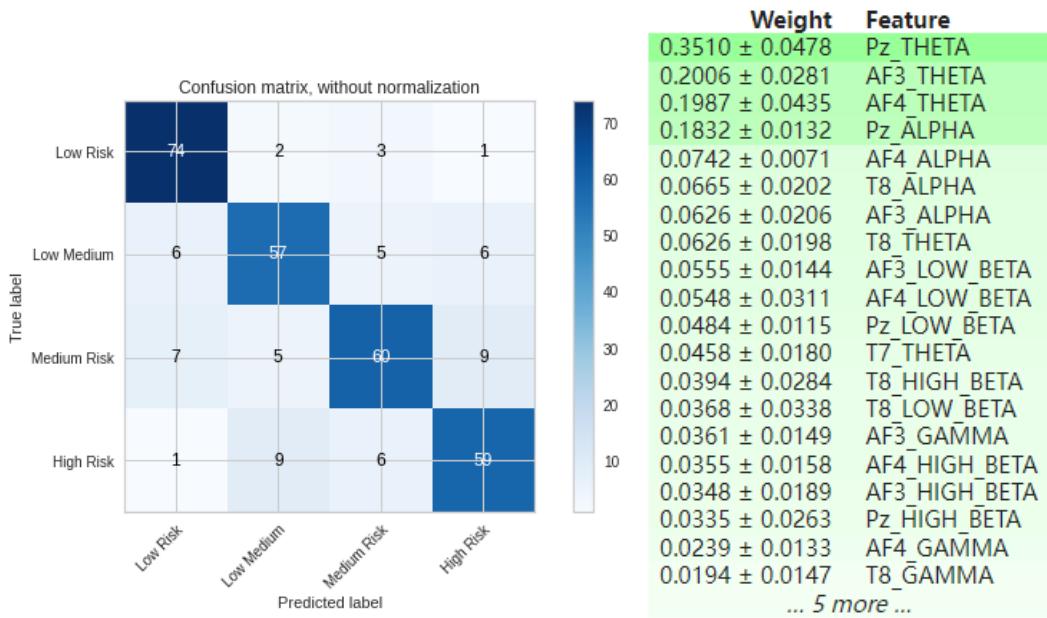
2 Poisoning rate 75%:





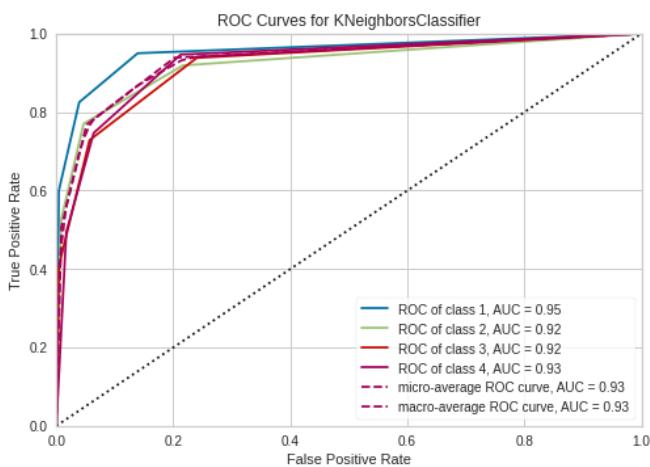
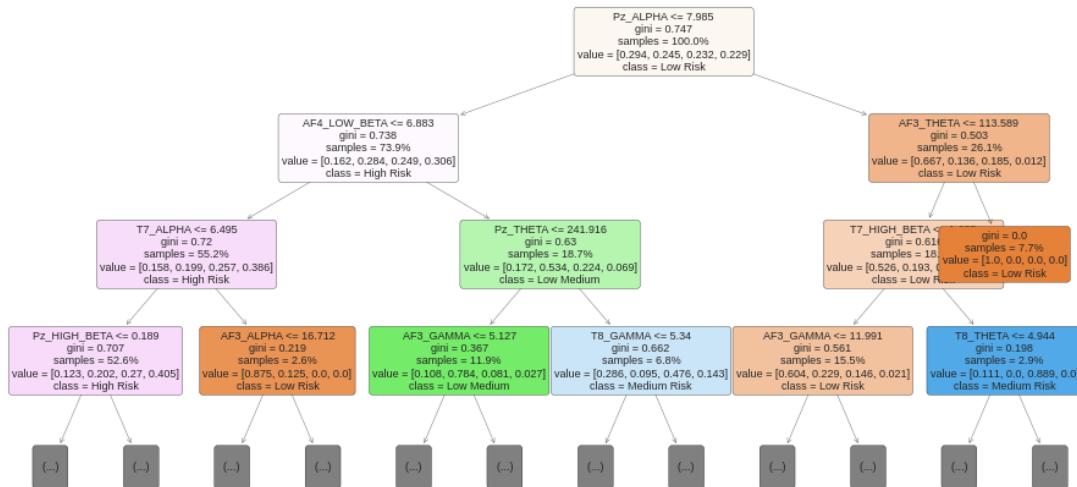
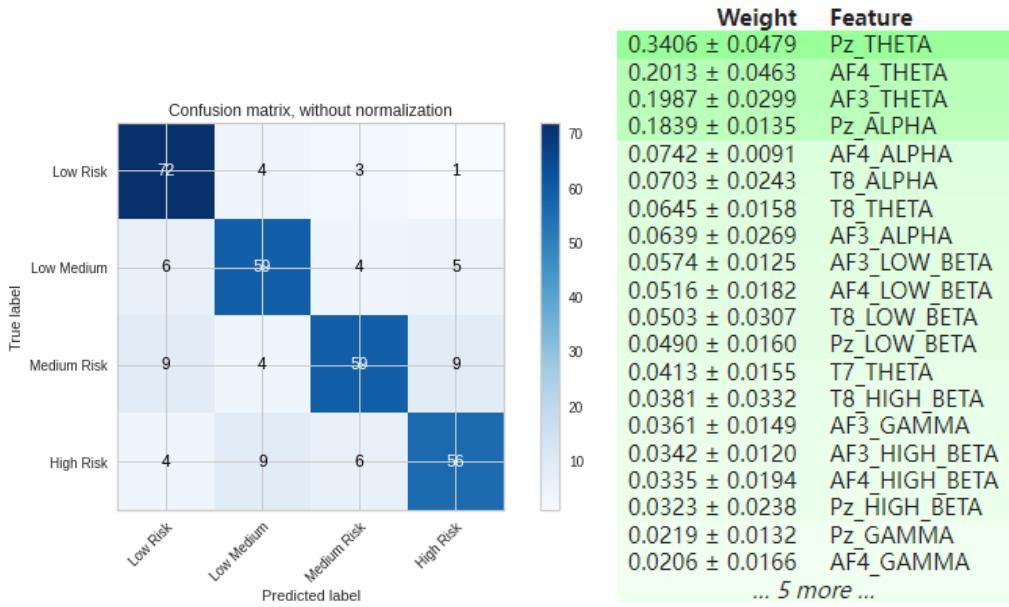
KNN

1 Poisoning rate 0%:



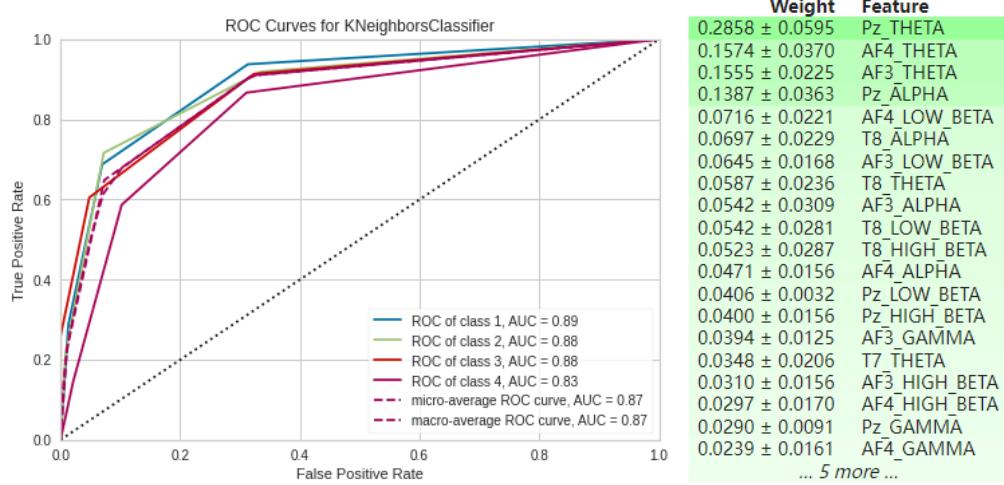
KNN

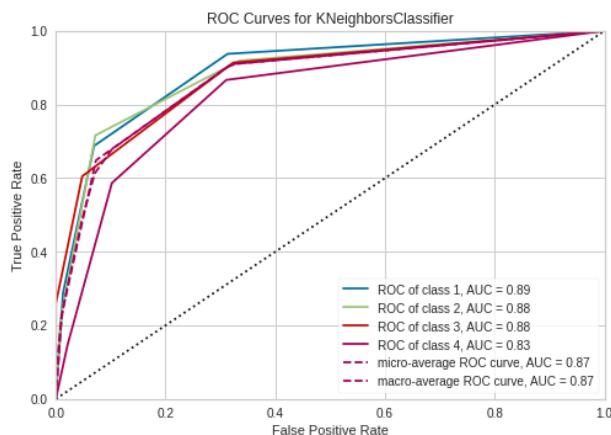
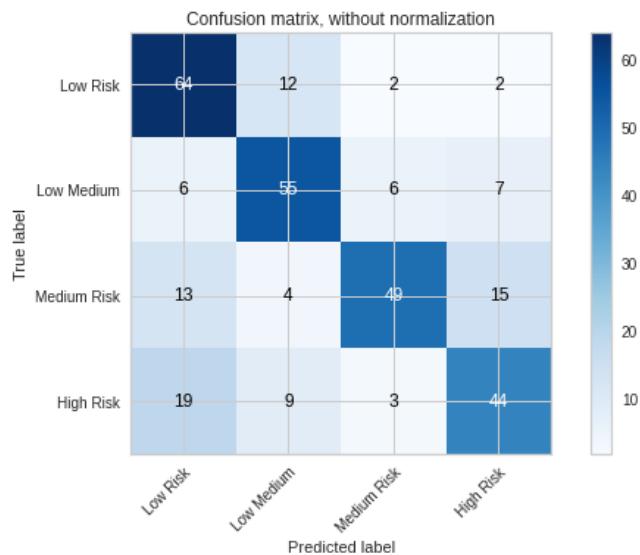
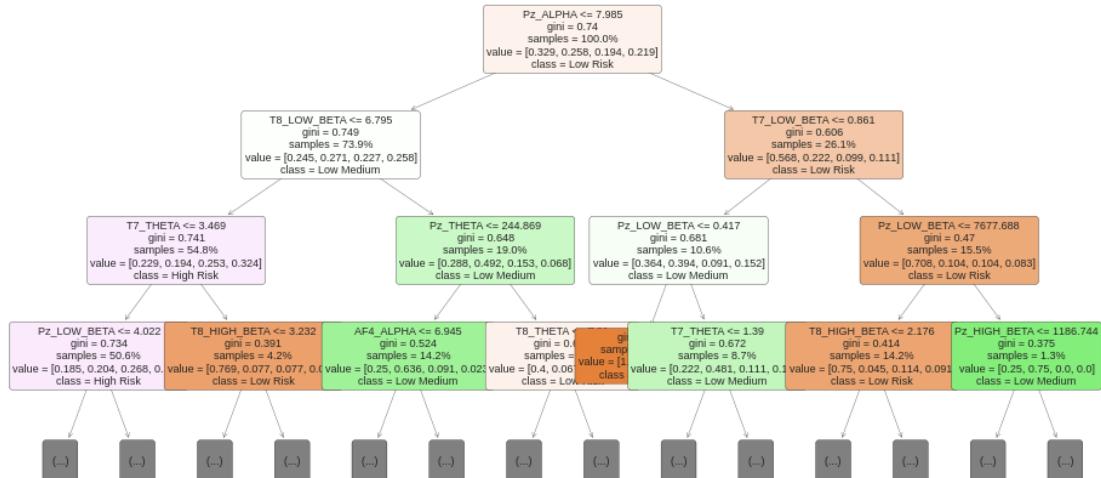
2 Poisoning rate 5%:



KNN

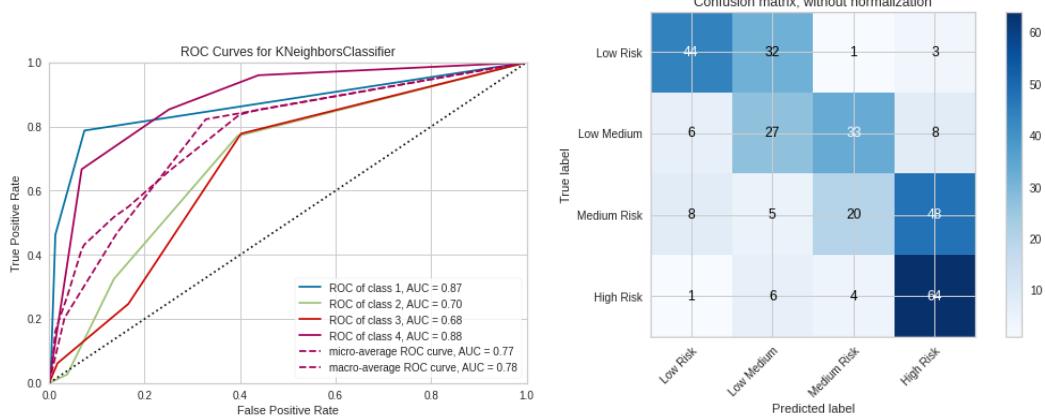
2 Poisoning rate 25%:



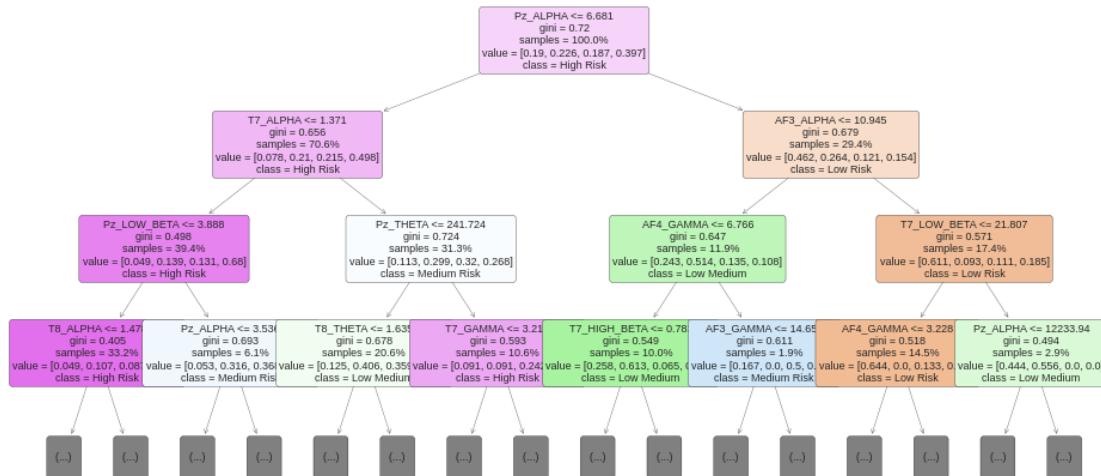


KNN

2 Poisoning rate 50%:

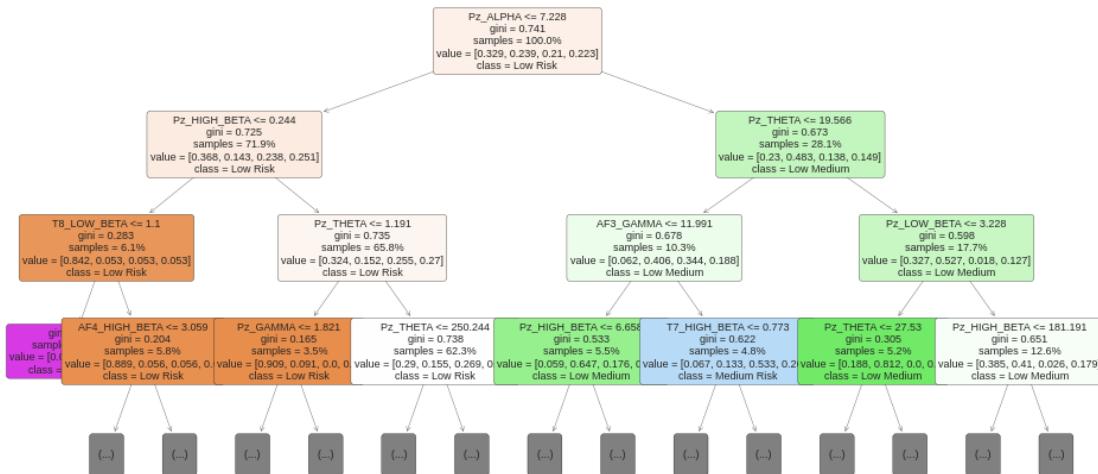
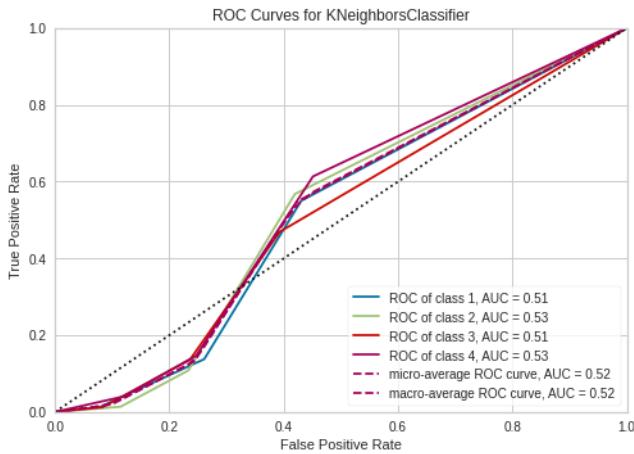
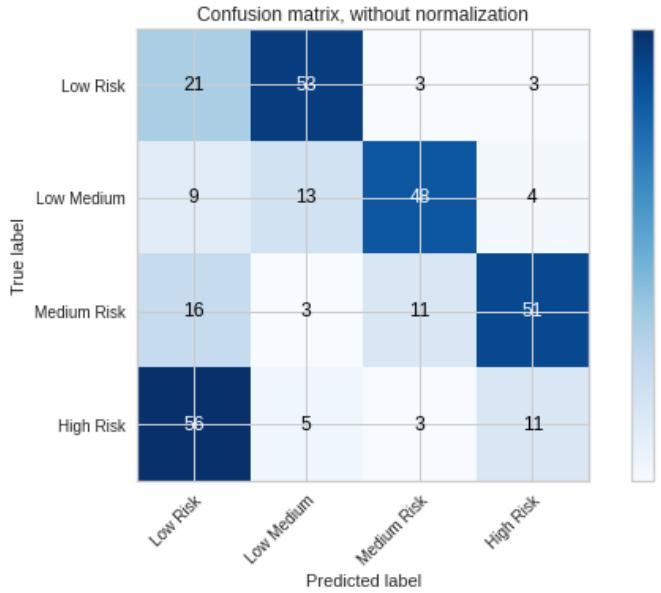


Weight	Feature
0.1426 ± 0.0450	Pz_THETA
0.0845 ± 0.0180	Pz_ALPHA
0.0768 ± 0.0309	AF4 THETA
0.0465 ± 0.0465	AF3 THETA
0.0400 ± 0.0409	T8_ALPHA
0.0245 ± 0.0318	AF4 ALPHA
0.0239 ± 0.0097	T8_ THETA
0.0226 ± 0.0163	Pz_HIGH_BETA
0.0194 ± 0.0227	AF4_LOW_BETA
0.0181 ± 0.0247	T8_HIGH_BETA
0.0174 ± 0.0194	T7_ THETA
0.0174 ± 0.0156	AF3_GAMMA
0.0135 ± 0.0149	AF4_HIGH_BETA
0.0129 ± 0.0178	Pz_LOW_BETA
0.0097 ± 0.0255	AF3_LOW_BETA
0.0097 ± 0.0200	Pz_GAMMA
0.0077 ± 0.0133	AF3_HIGH_BETA
0.0077 ± 0.0120	AF4_GAMMA
0.0077 ± 0.0145	T8_GAMMA
0.0071 ± 0.0048	T7_GAMMA
... 5 more ...	



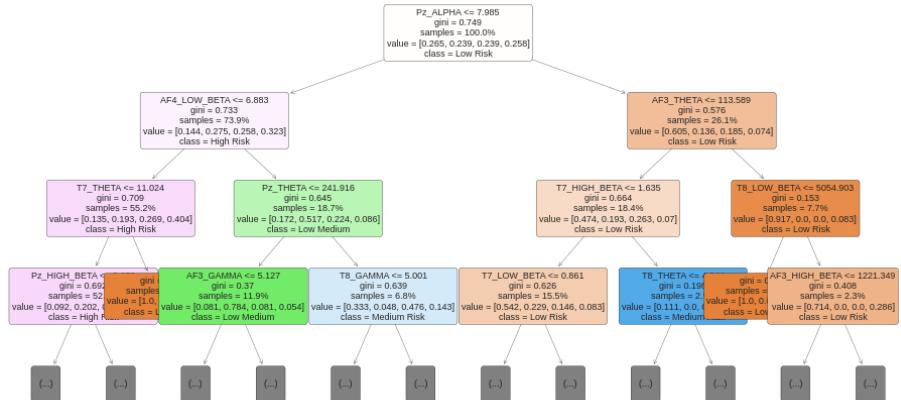
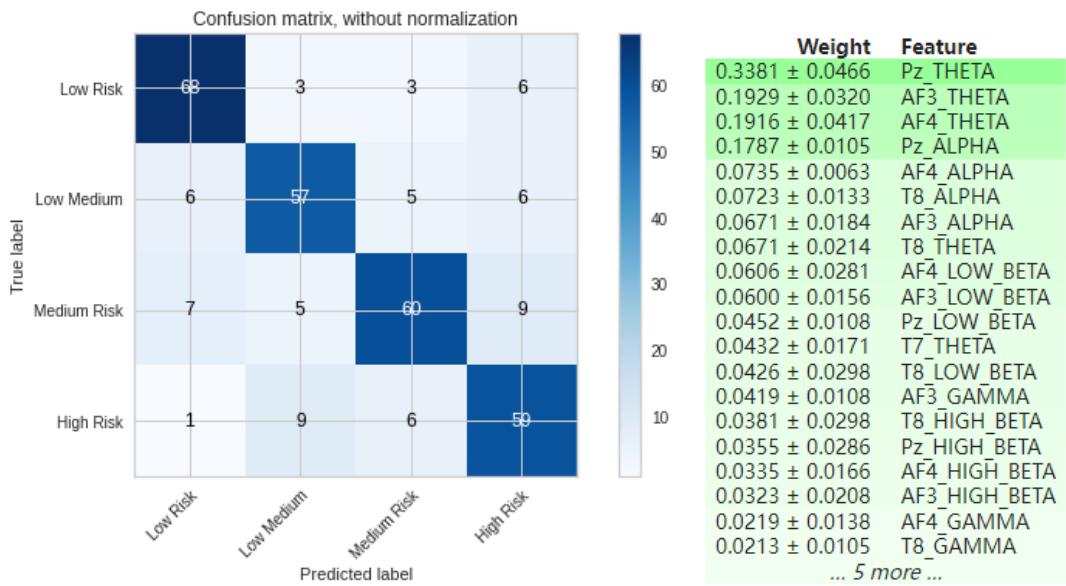
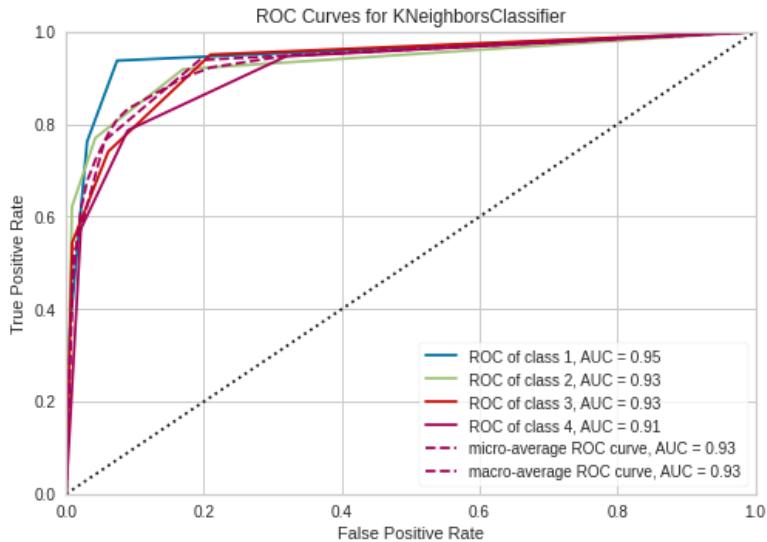
KNN

2 Poisoning rate 75%:



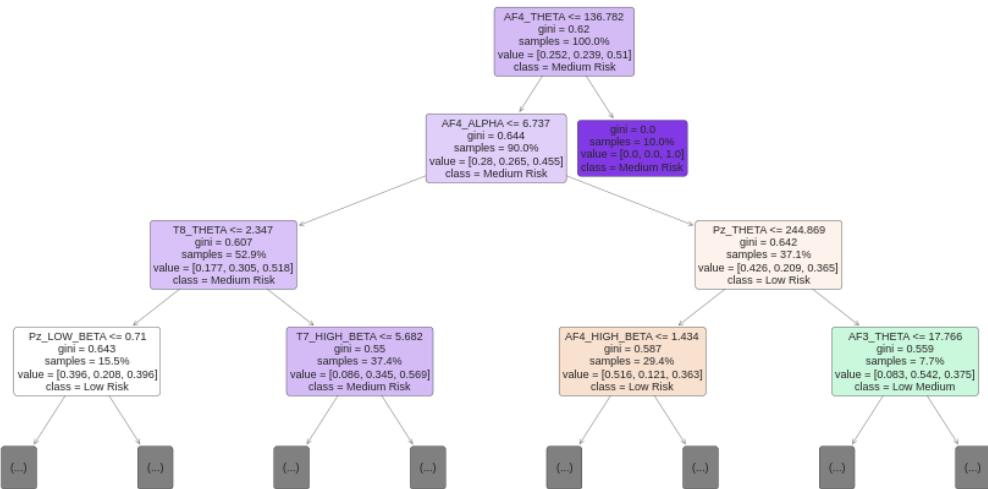
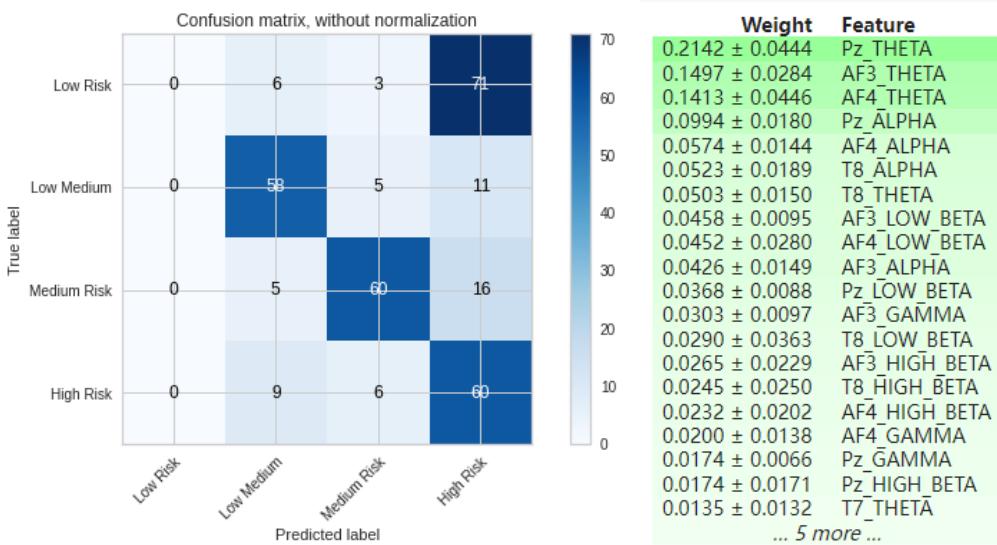
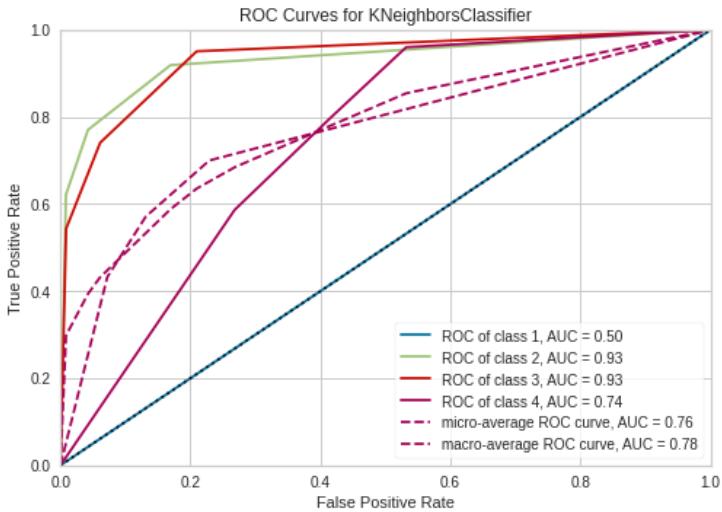
KNN

1 Poisoning rate 5%:



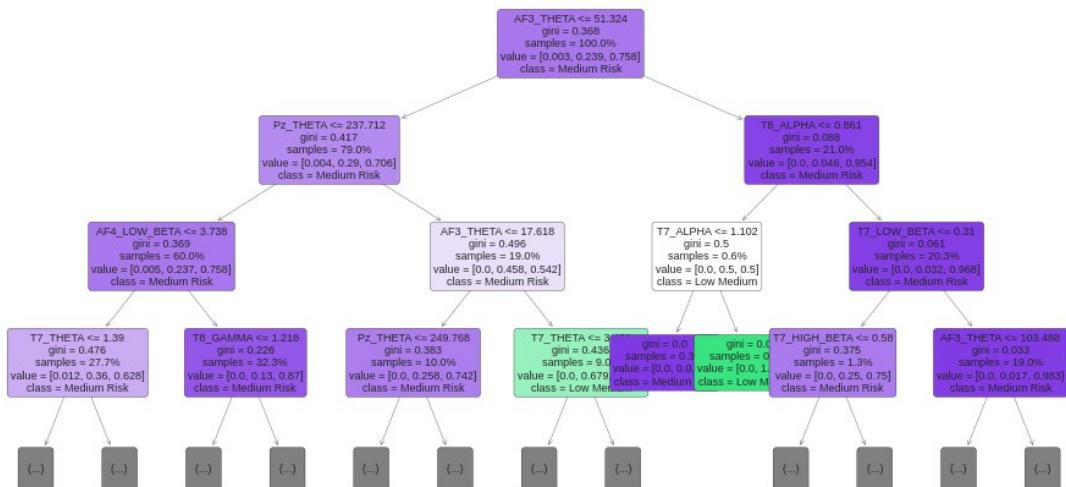
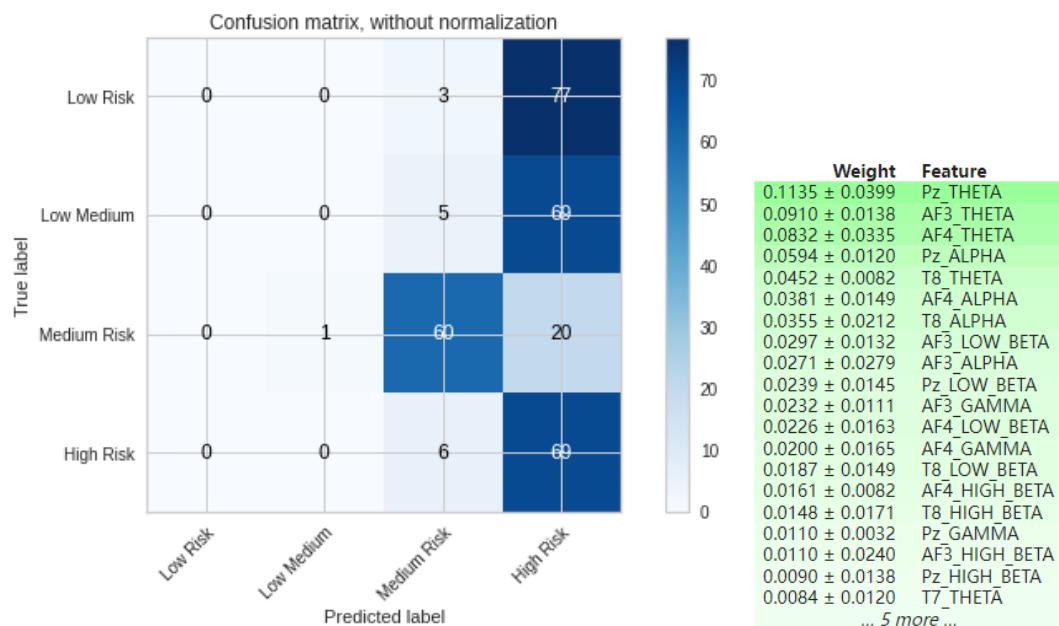
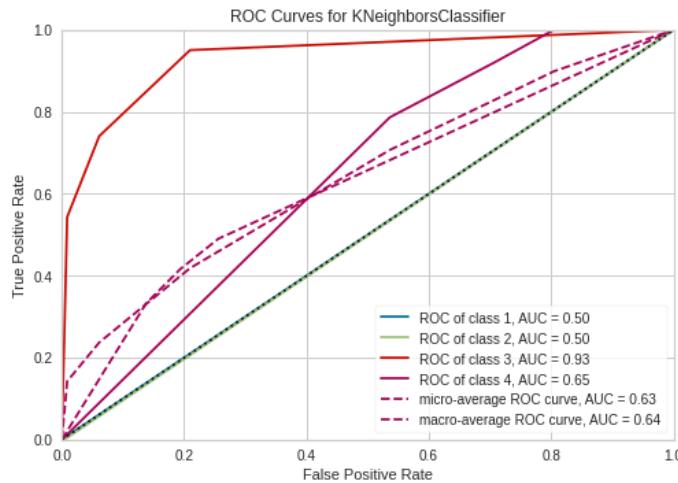
KNN

1 Poisoning rate 25%:



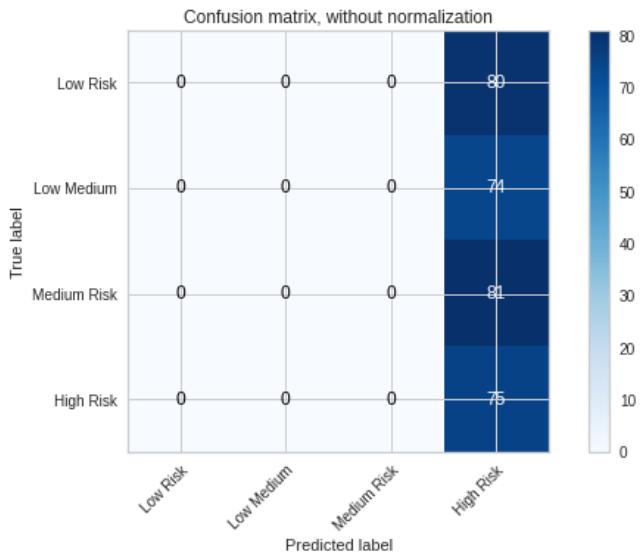
KNN

1 Poisoning rate 50%:



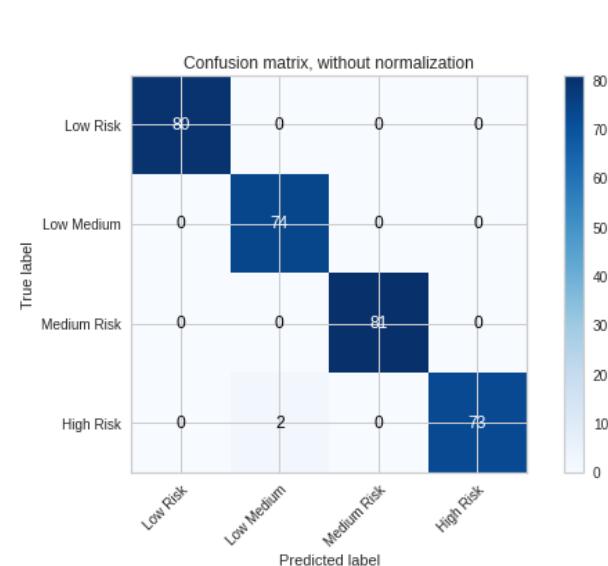
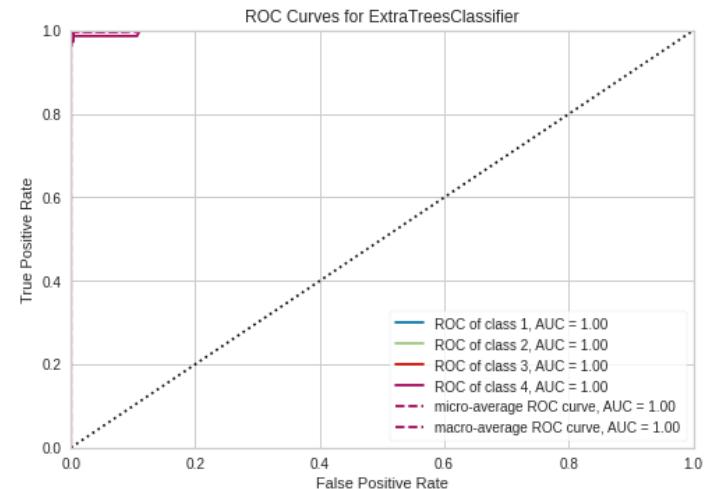
KNN

1 Poisoning rate 75%:



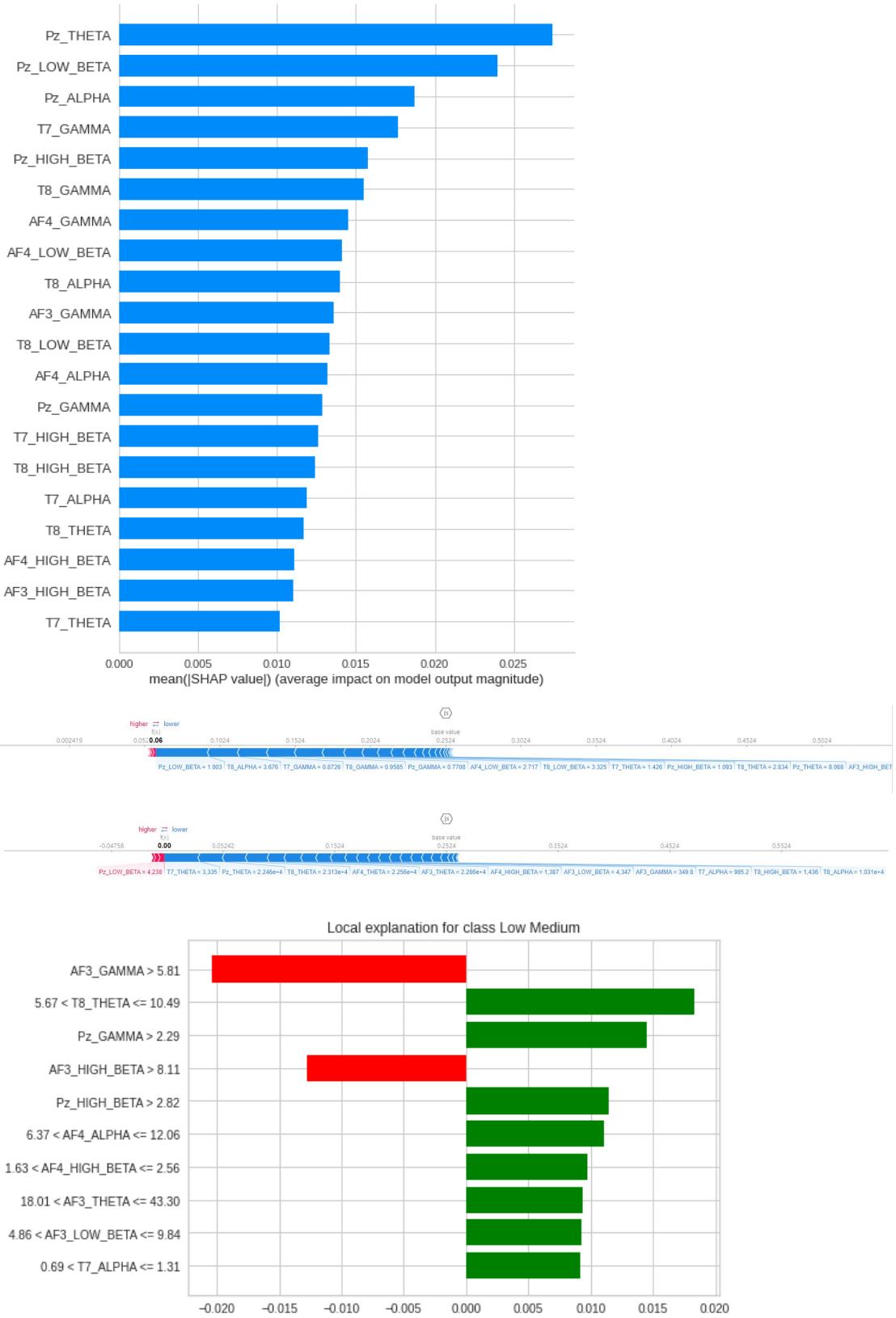
ExtraTreesClassifier

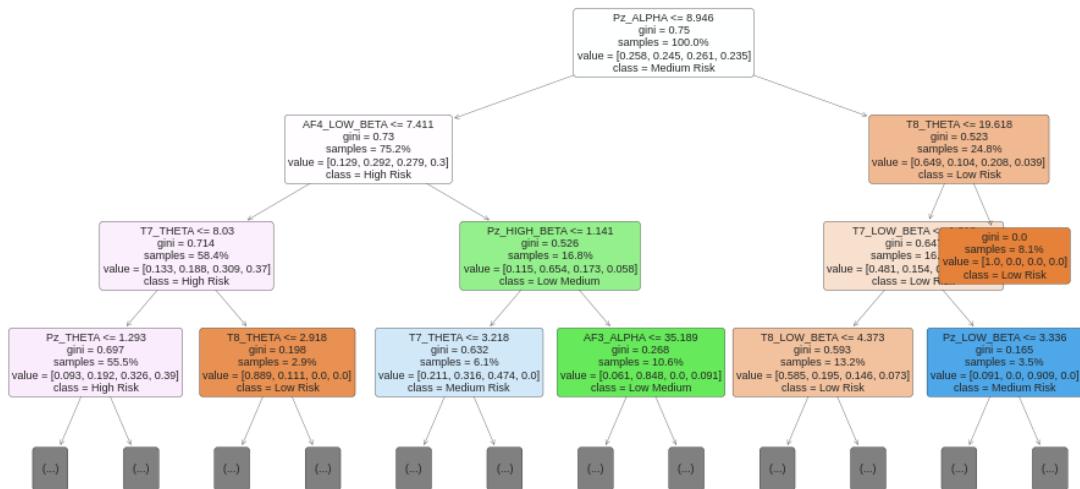
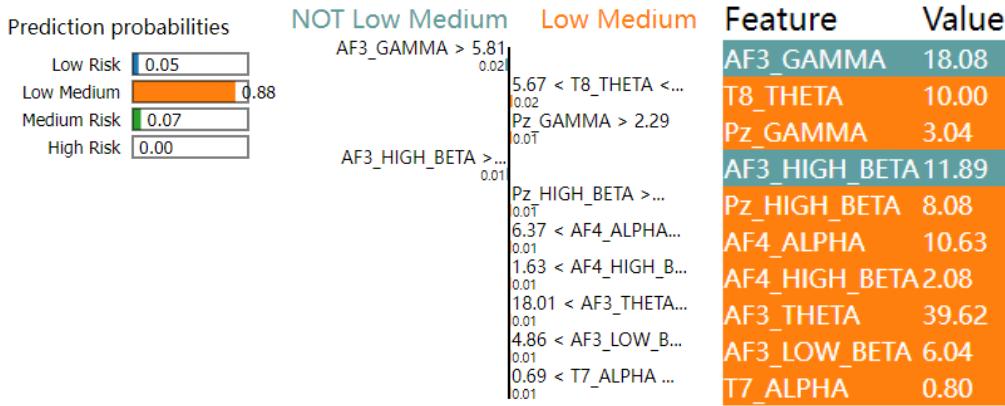
1 Poisoning rate 0%:



Weight	Feature
0.0471 ± 0.0097	Pz_THETA
0.0187 ± 0.0155	Pz_ALPHA
0.0148 ± 0.0088	T7_THETA
0.0071 ± 0.0048	Pz_LOW_BETA
0.0058 ± 0.0048	T7_GAMMA
0.0045 ± 0.0032	T8_HIGH_BETA
0.0039 ± 0.0075	T7_ALPHA
0.0032 ± 0.0041	Pz_GAMMA
0.0026 ± 0.0075	AF4_THETA
0.0019 ± 0.0052	AF4_ALPHA
0.0019 ± 0.0088	T8_THETA
0.0019 ± 0.0032	AF4_LOW_BETA
0.0013 ± 0.0032	T8_LOW_BETA
0.0013 ± 0.0032	T7_HIGH_BETA
0.0006 ± 0.0026	T8_ALPHA
0.0006 ± 0.0026	Pz_HIGH_BETA
0.0006 ± 0.0026	T8_GAMMA
0 ± 0.0000	AF3_HIGH_BETA
0 ± 0.0000	AF3_LOW_BETA
0 ± 0.0000	AF3_GAMMA

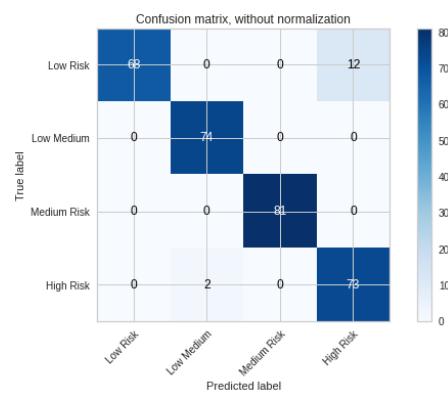
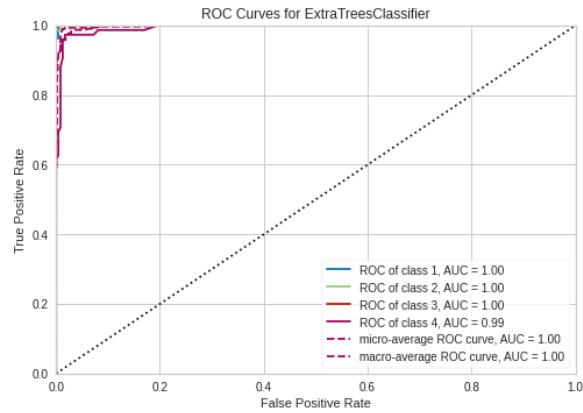
... 5 more ...

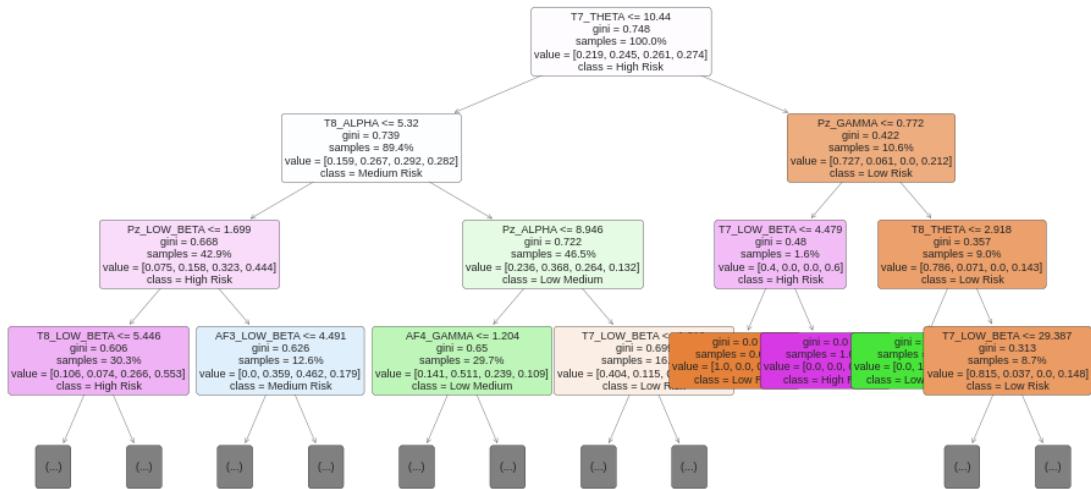




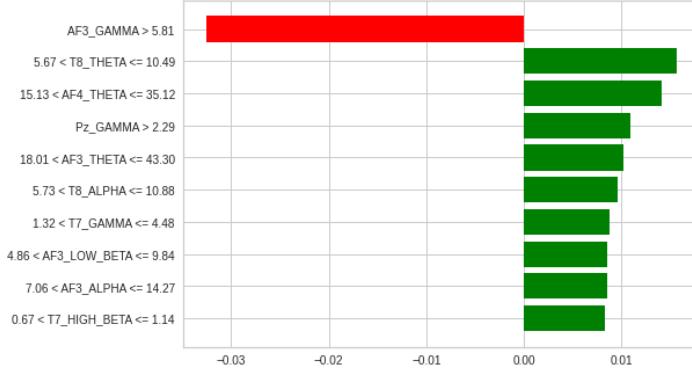
ExtraTreesClassifier

1 Poisoning rate 5%:





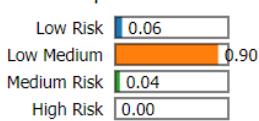
Local explanation for class Low Medium



Feature Value

AF3_GAMMA	18.08
T8_Theta	10.00
AF4_Theta	28.95
Pz_Gamma	3.04
AF3_Theta	39.62
T8_Alpha	8.54
T7_Gamma	2.07
AF3_Low_Beta	6.04
AF3_Alpha	9.72
T7_High_Beta	0.78

Prediction probabilities



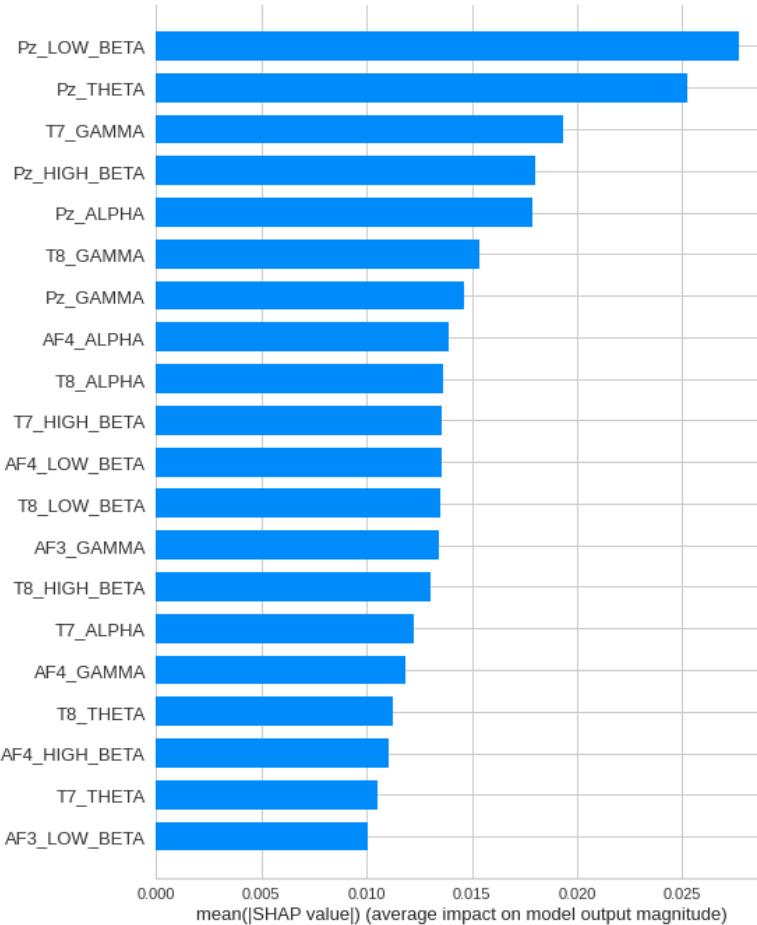
NOT Low Medium Low Medium

AF3_Gamma > 5.81
5.67 < T8_Theta < ...
15.13 < AF4_Theta ...
Pz_Gamma > 2.29
18.01 < AF3_Theta ...
5.73 < T8_Alpha < ...
1.32 < T7_Gamma ...
4.86 < AF3_Low_B...
7.06 < AF3_Alpha...
0.67 < T7_High_B...

Weight Feature

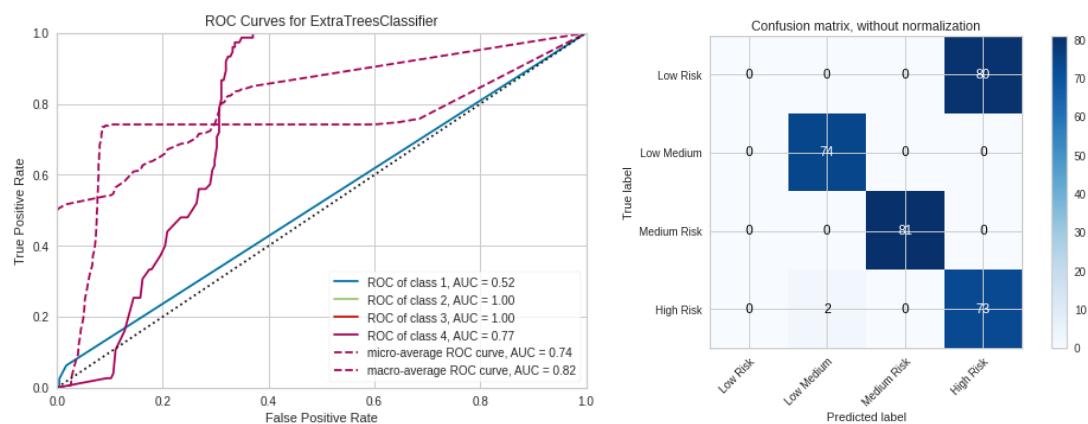
0.0484 ± 0.0204	Pz_Theta
0.0123 ± 0.0075	Pz_Alpha
0.0077 ± 0.0112	T7_Gamma
0.0045 ± 0.0120	T7_Theta
0.0039 ± 0.0048	T8_Theta
0.0032 ± 0.0115	AF3_Gamma
0.0000 ± 0.0091	Pz_Low_Beta
-0.0013 ± 0.0066	AF4_Theta
-0.0019 ± 0.0097	AF3_Theta
-0.0019 ± 0.0088	Pz_High_Beta
-0.0026 ± 0.0048	T7_High_Beta
-0.0026 ± 0.0048	T8_Alpha
-0.0032 ± 0.0041	AF3_High_Beta
-0.0032 ± 0.0082	T8_High_Beta
-0.0039 ± 0.0063	T8_Gamma
-0.0039 ± 0.0063	T8_Low_Beta
-0.0039 ± 0.0048	Pz_Gamma
-0.0045 ± 0.0077	T7_Low_Beta
-0.0058 ± 0.0048	T7_Alpha
-0.0065 ± 0.0000	AF3_Low_Beta

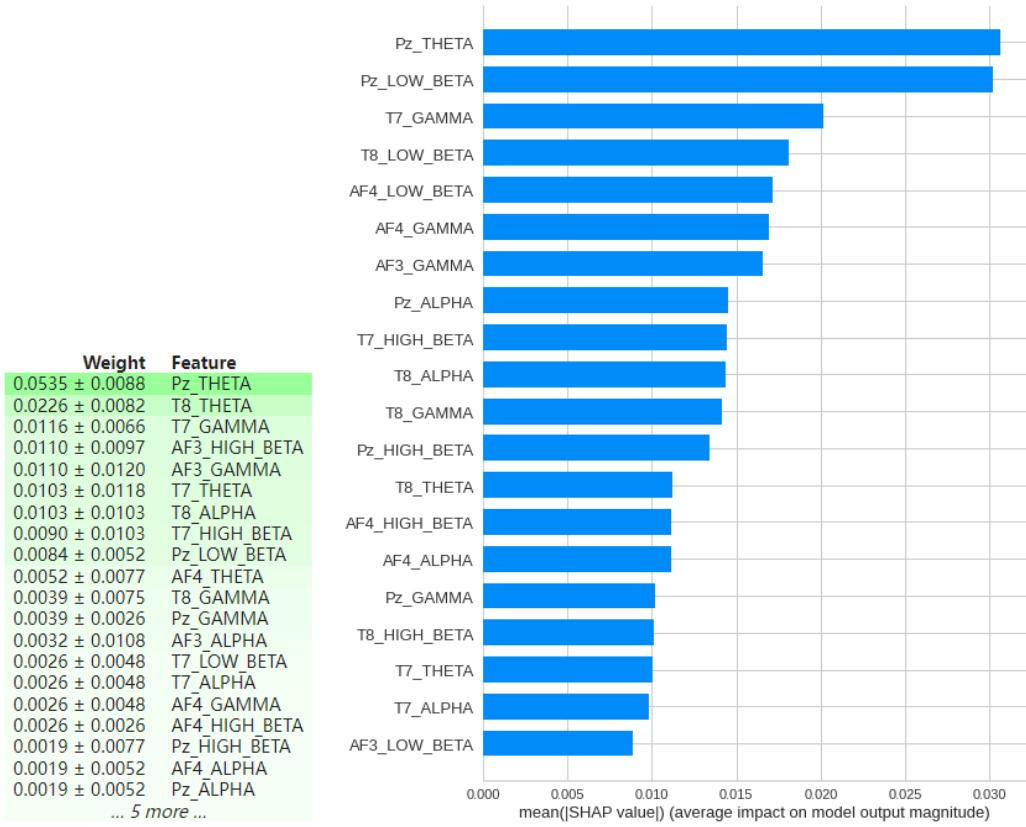
... 5 more ...

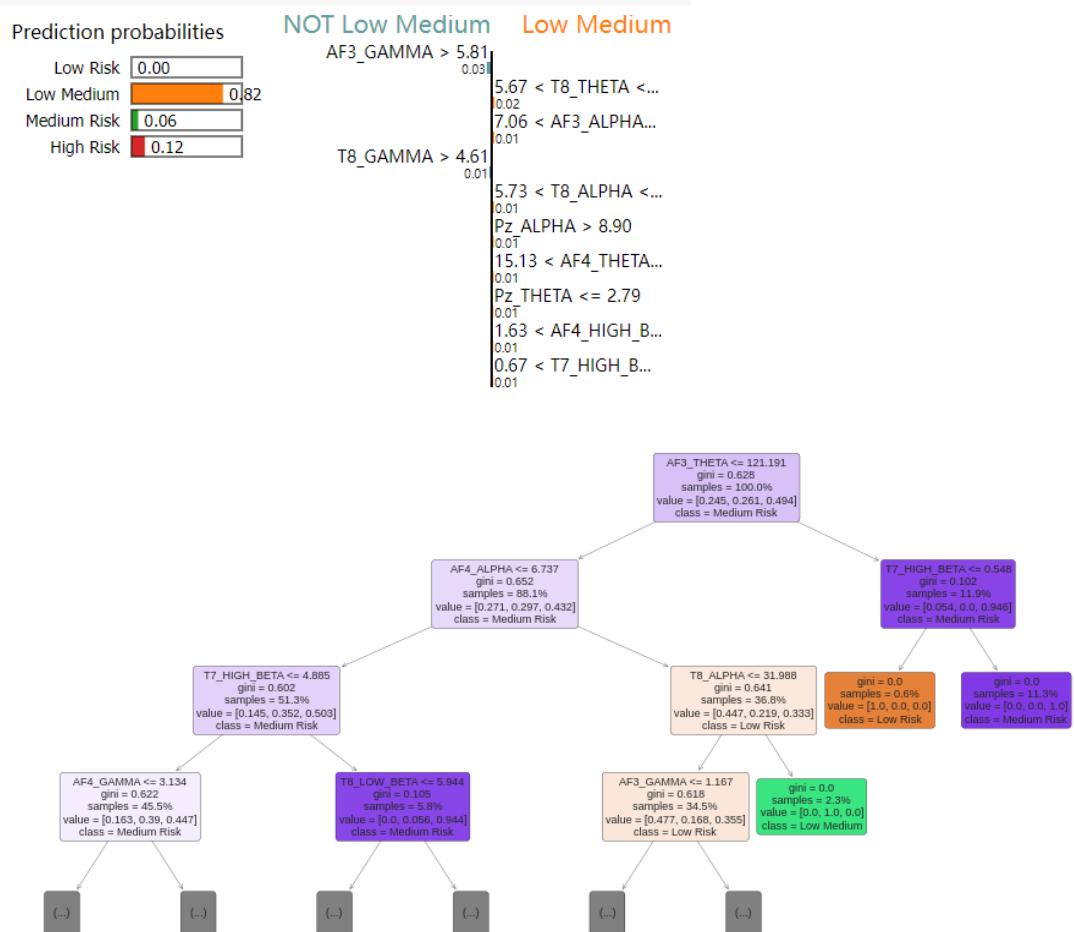


ExtraTreesClassifier

1 Poisoning rate 25%:

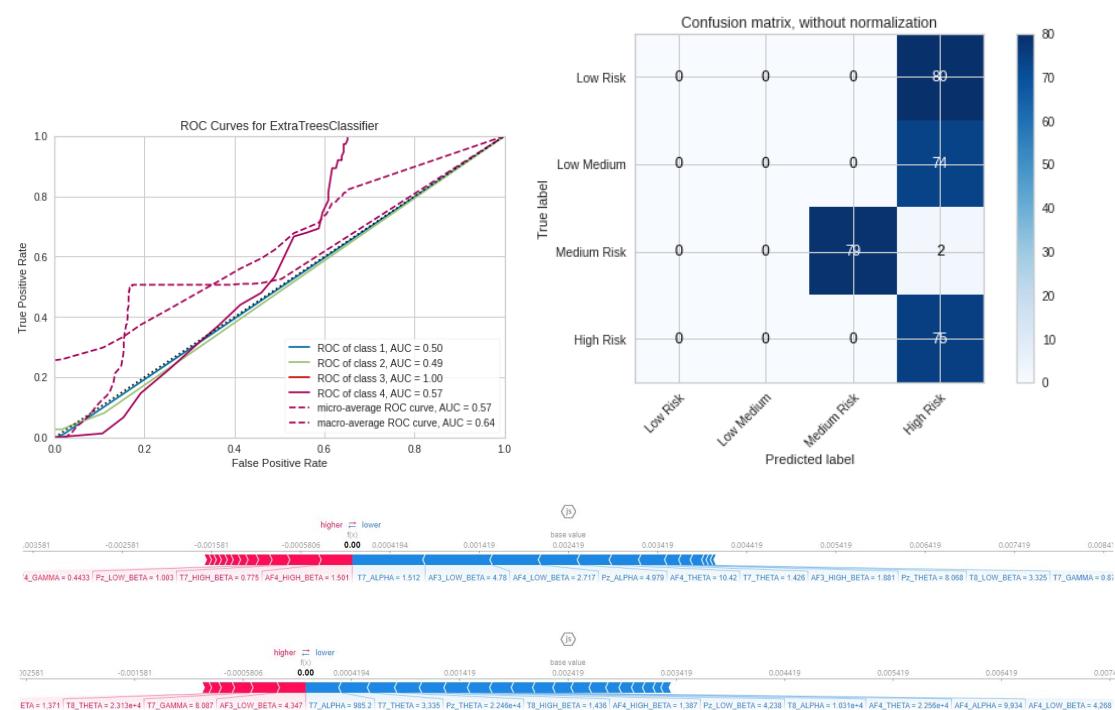


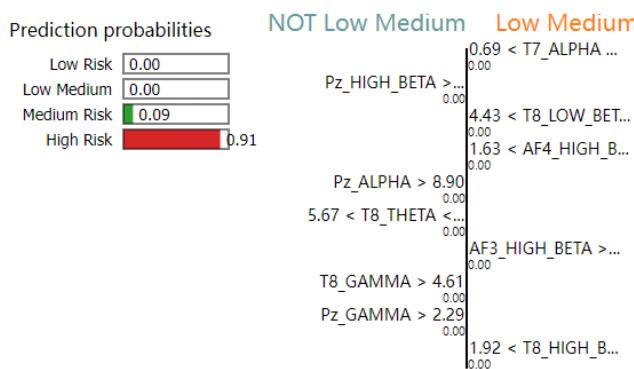
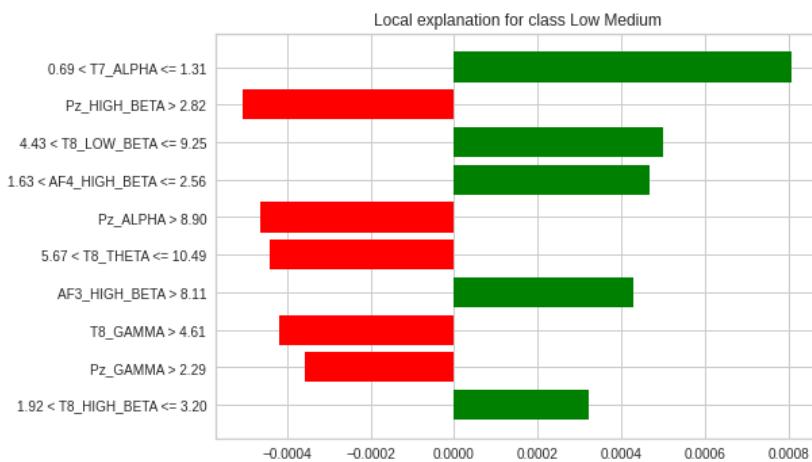
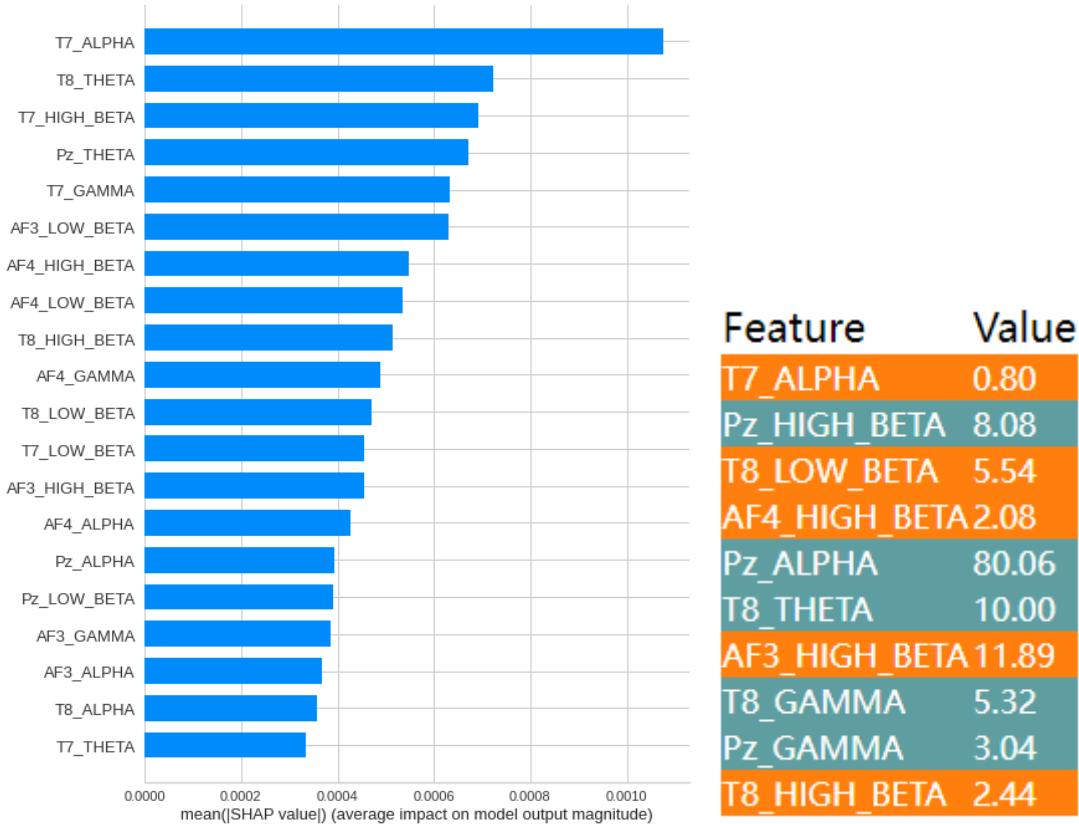


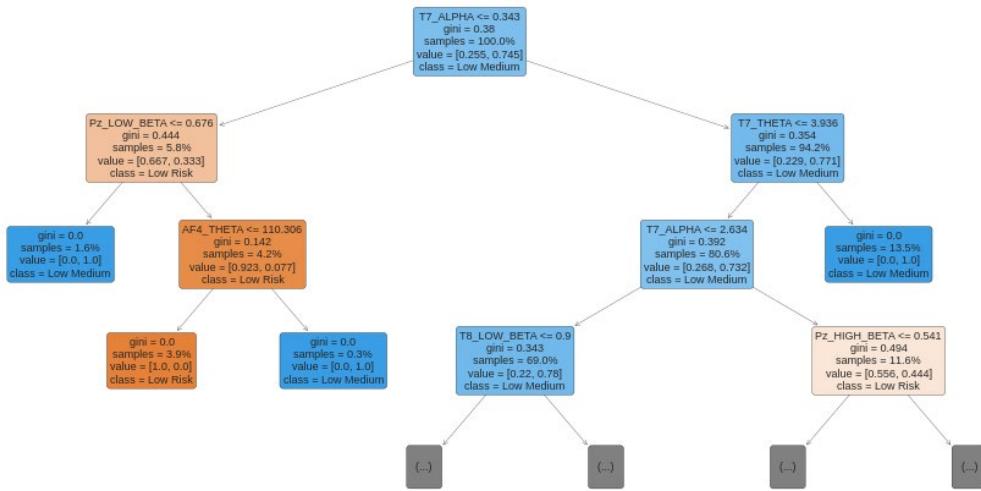


ExtraTreesClassifier

1 Poisoning rate 50%:

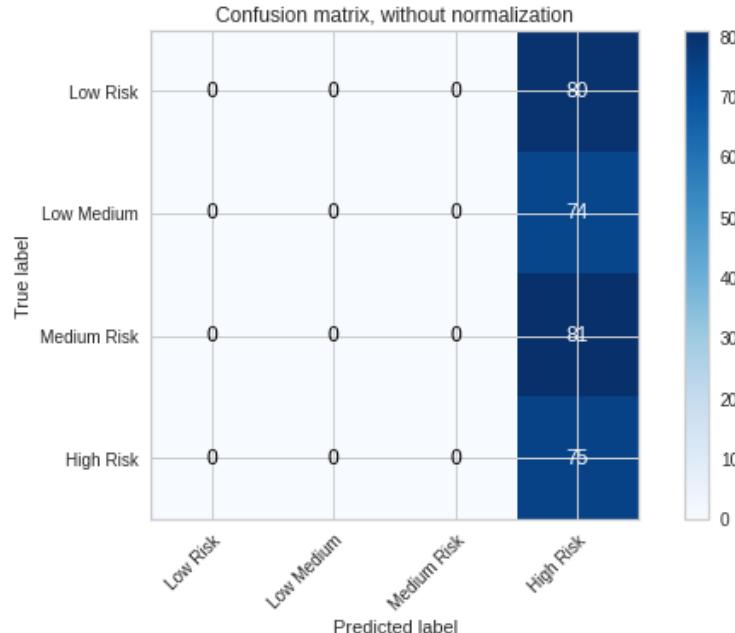






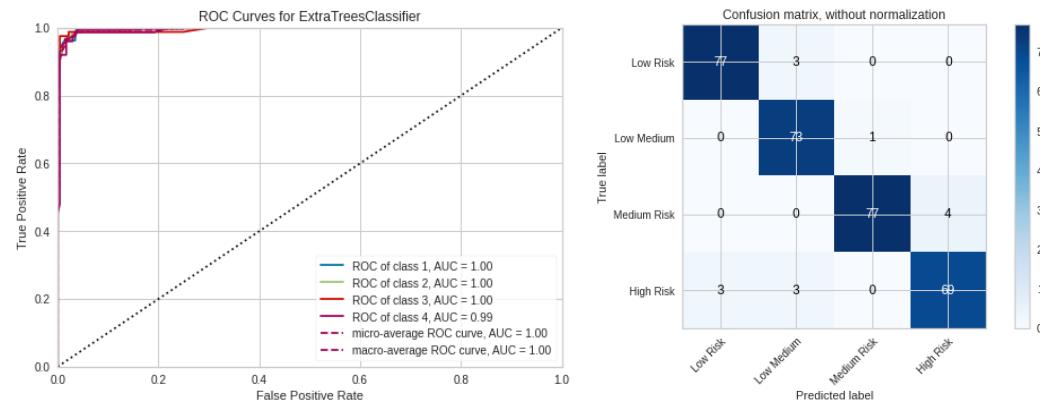
ExtraTreesClassifier

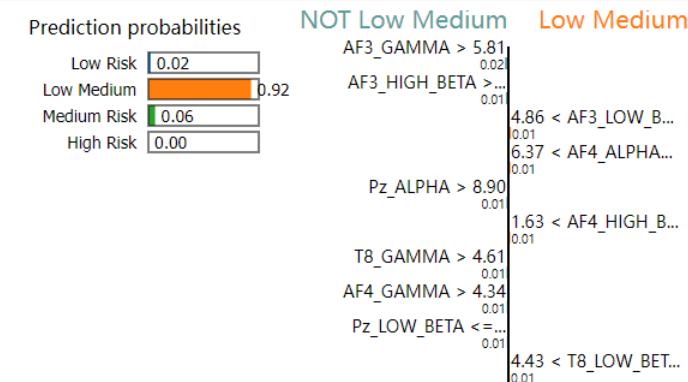
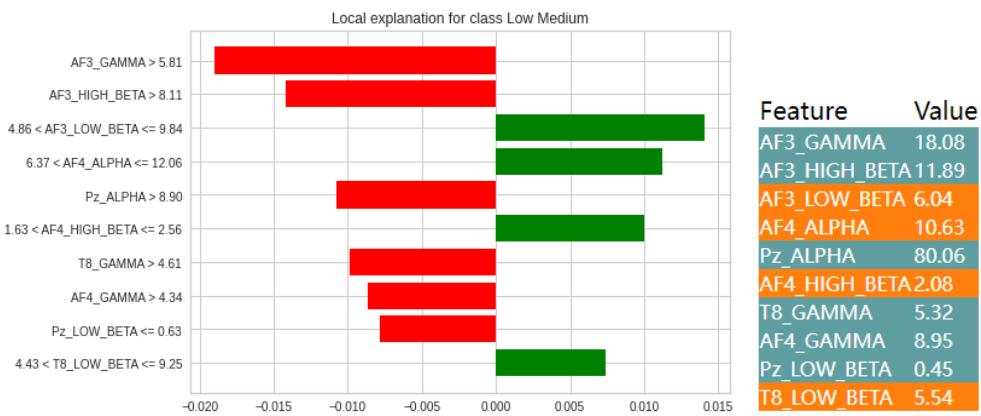
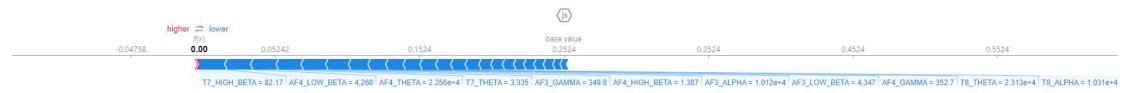
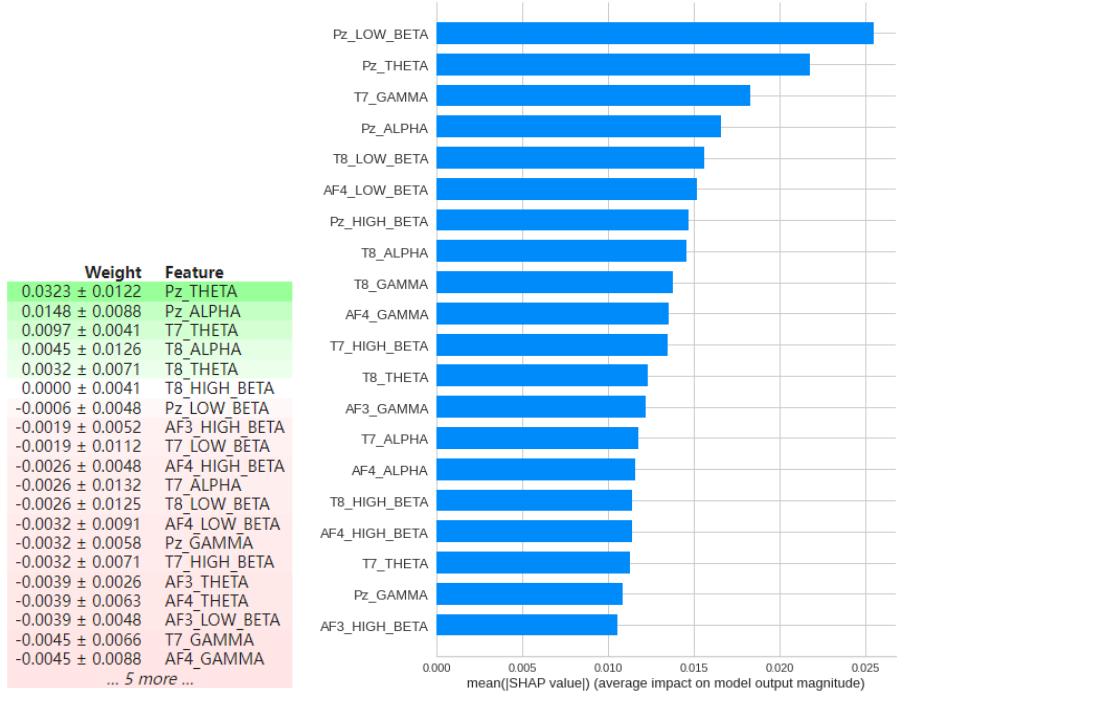
1 Poisoning rate 75%:

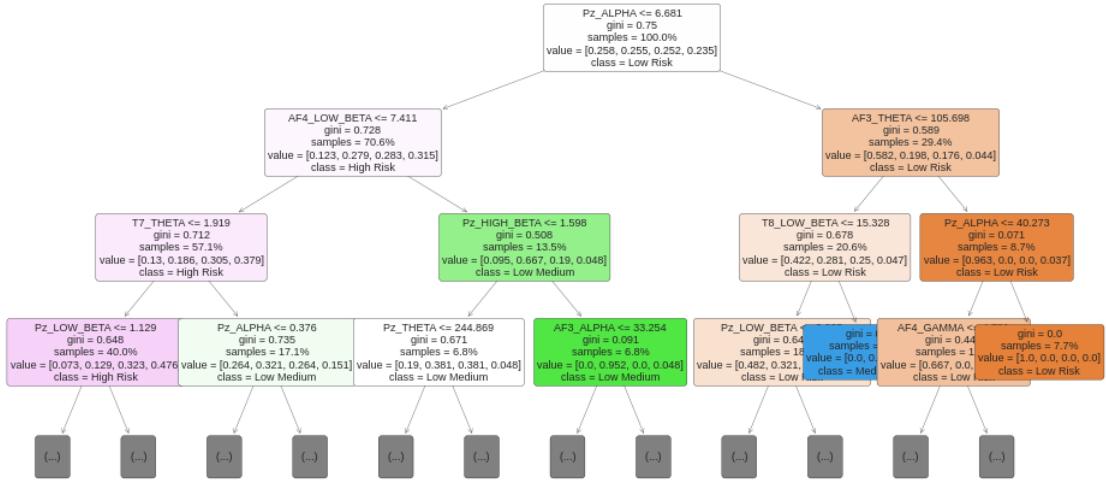


ExtraTreesClassifier

2 Poisoning rate 5%:

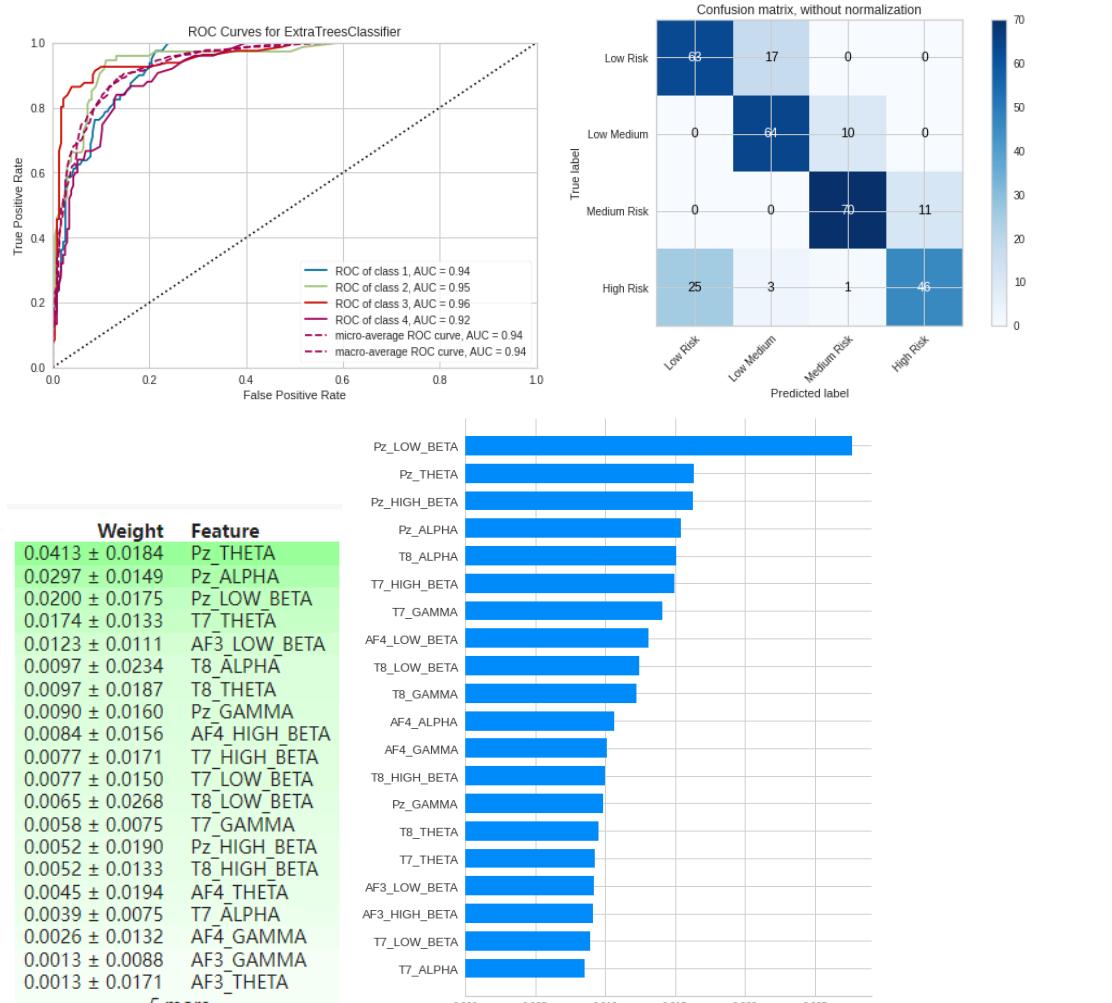


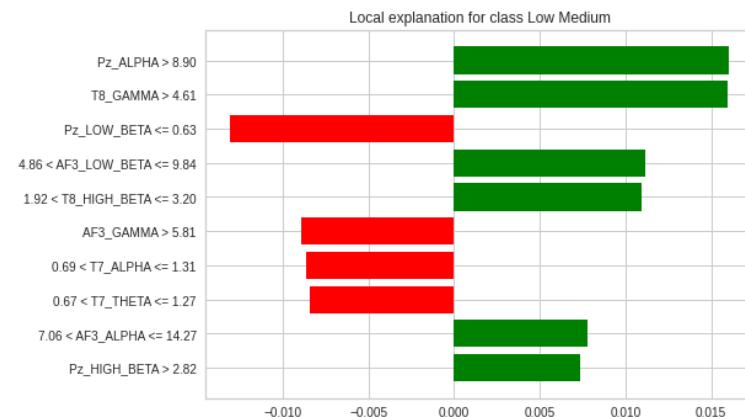




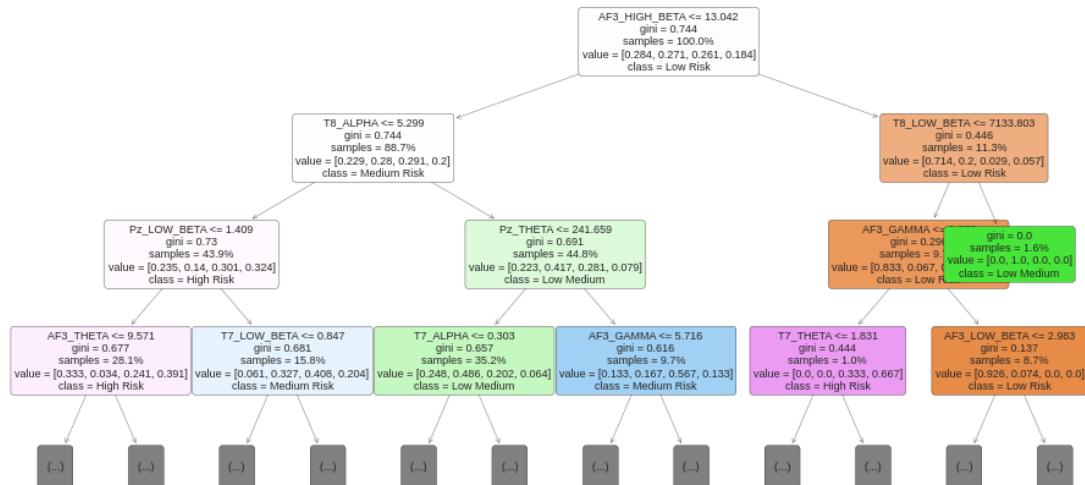
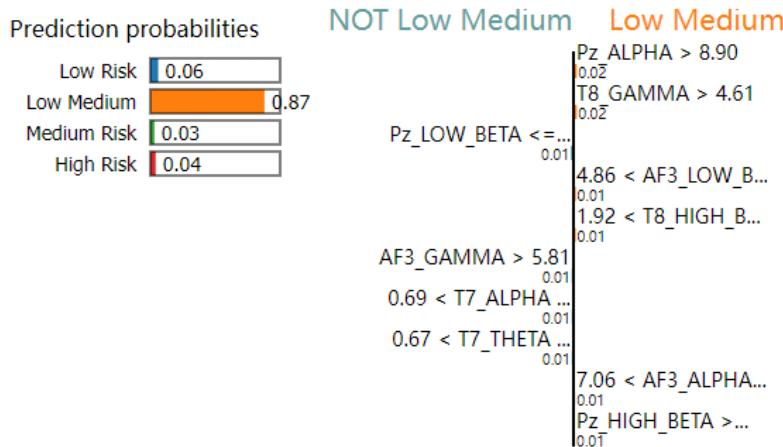
ExtraTreesClassifier

2 Poisoning rate 25%:



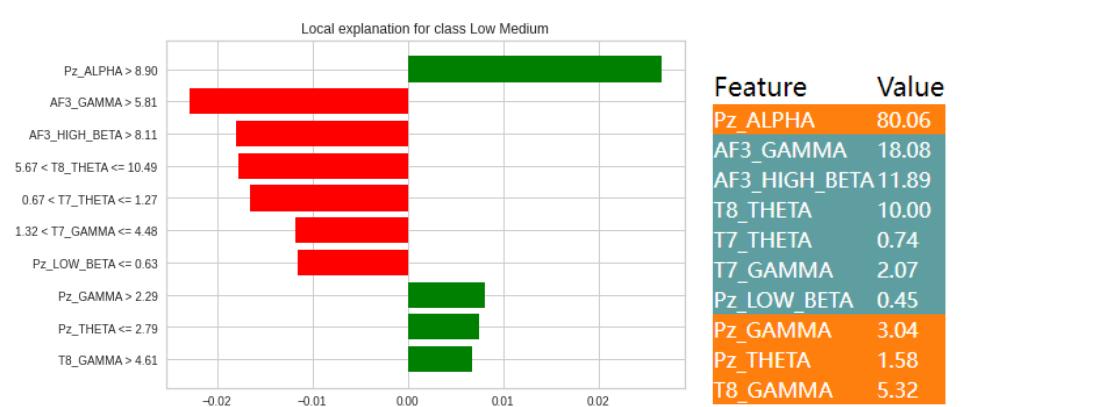
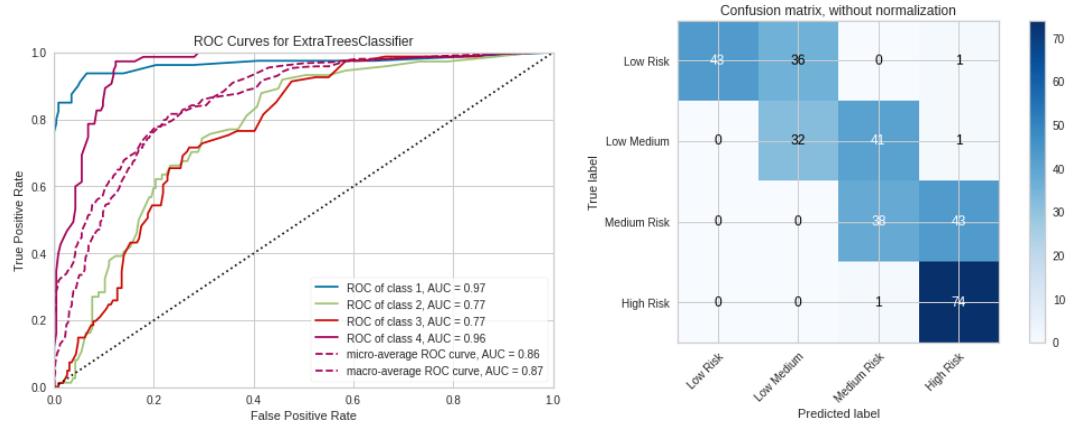


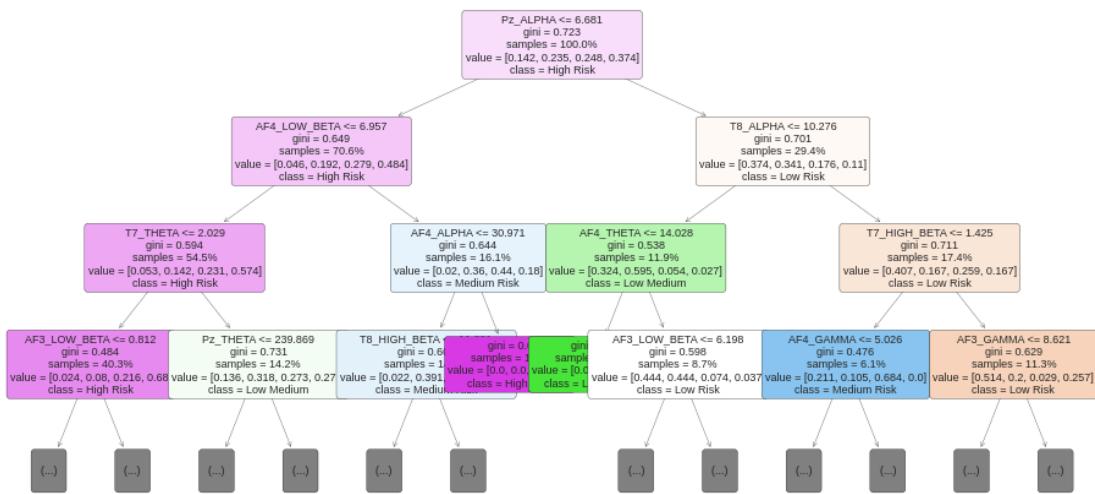
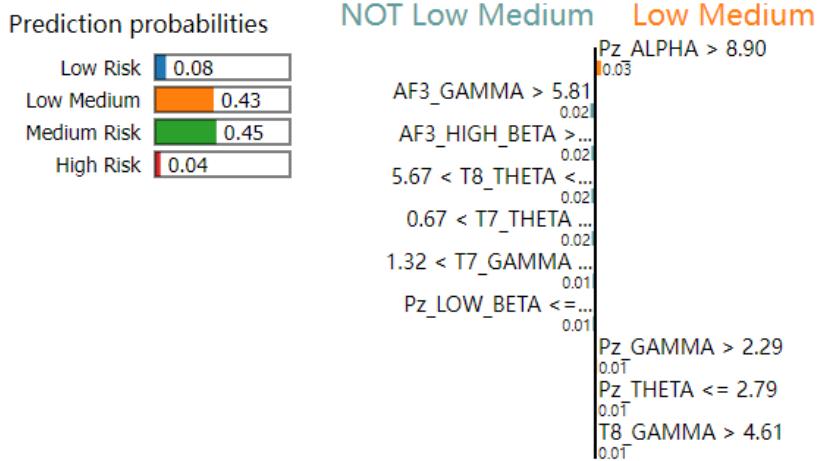
Feature	Value
Pz_ALPHA	80.06
T8_GAMMA	5.32
Pz_LOW_BETA	0.45
AF3_LOW_BETA	6.04
T8_HIGH_BETA	2.44
AF3_GAMMA	18.08
T7_ALPHA	0.80
T7_THETA	0.74
AF3_ALPHA	9.72
Pz_HIGH_BETA	8.08



ExtraTreesClassifier

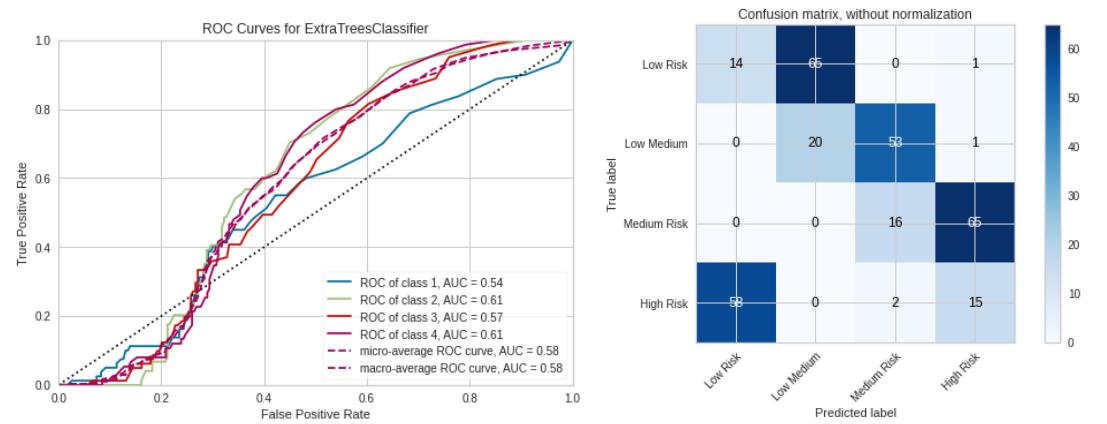
2 Poisoning rate 50%:

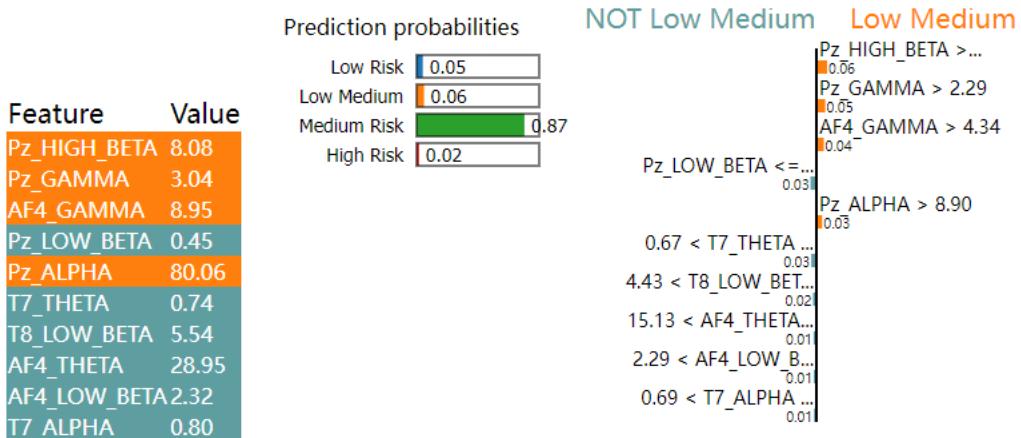
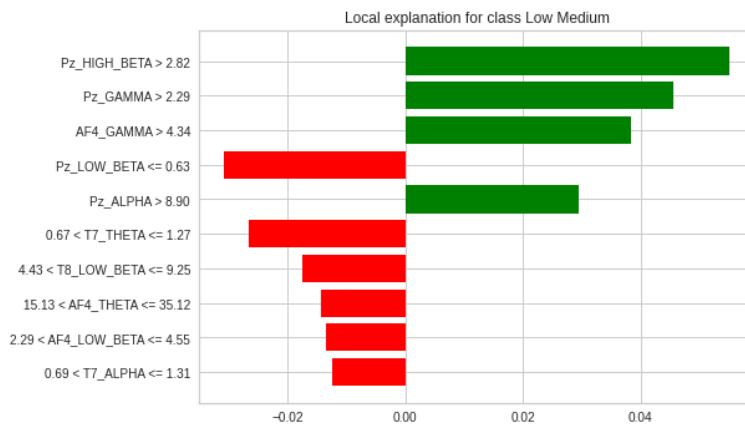
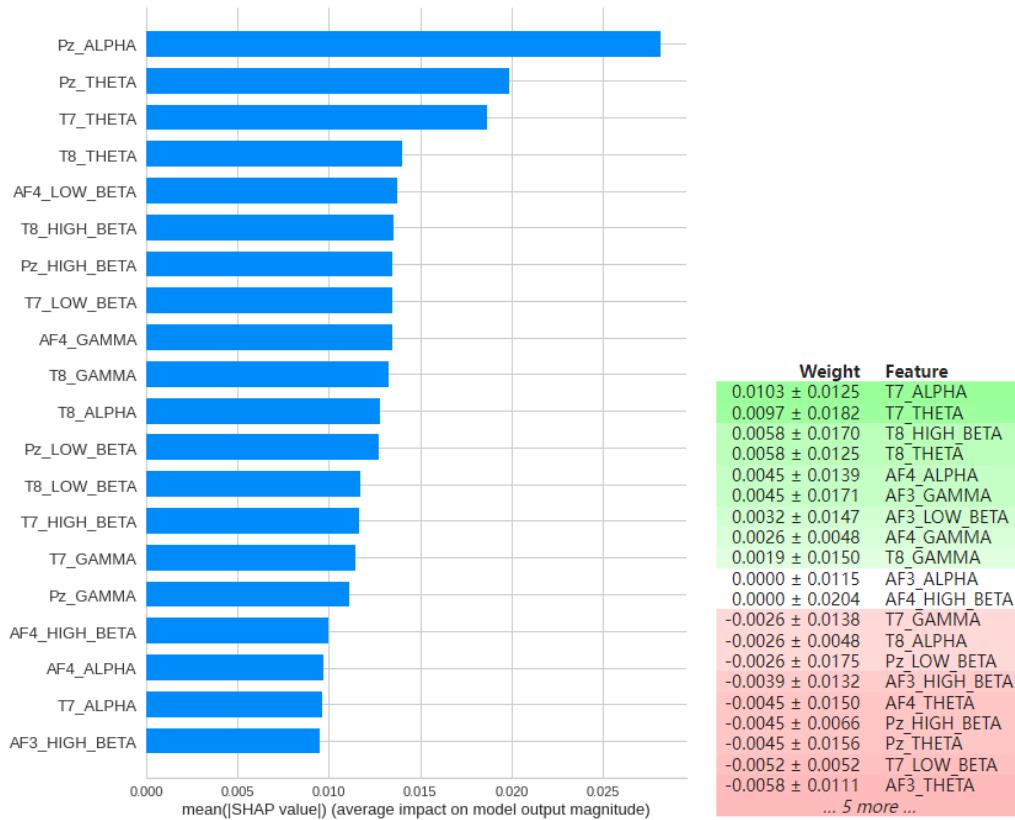


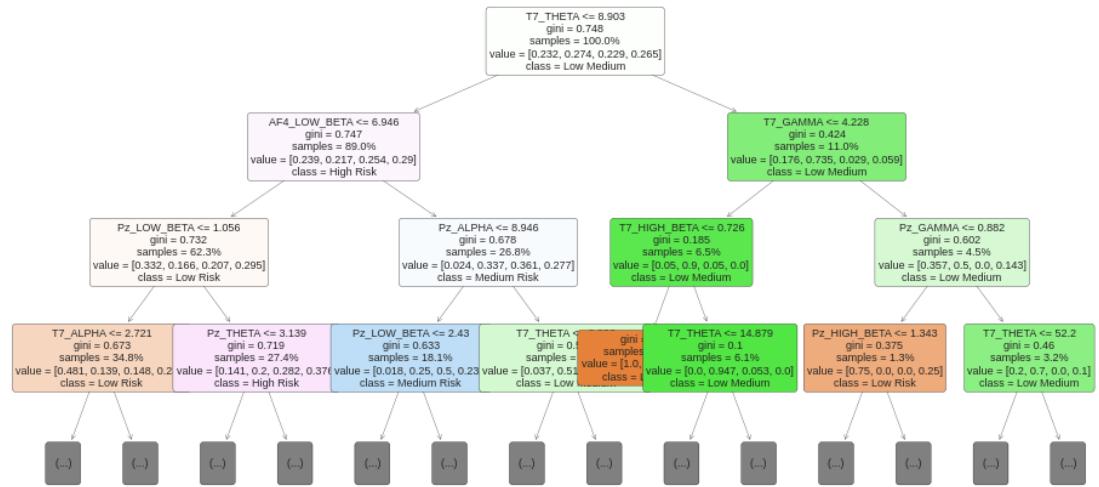


ExtraTreesClassifier

2 Poisoning rate 75%:

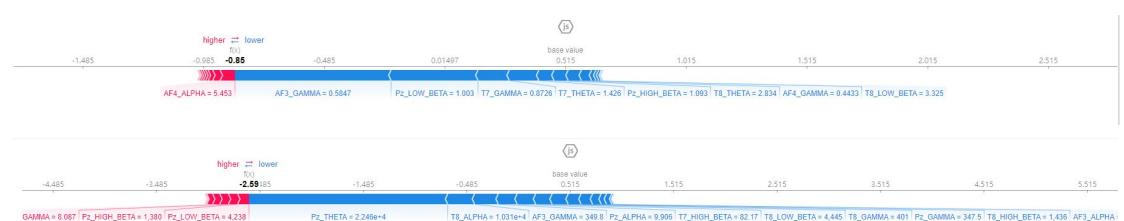
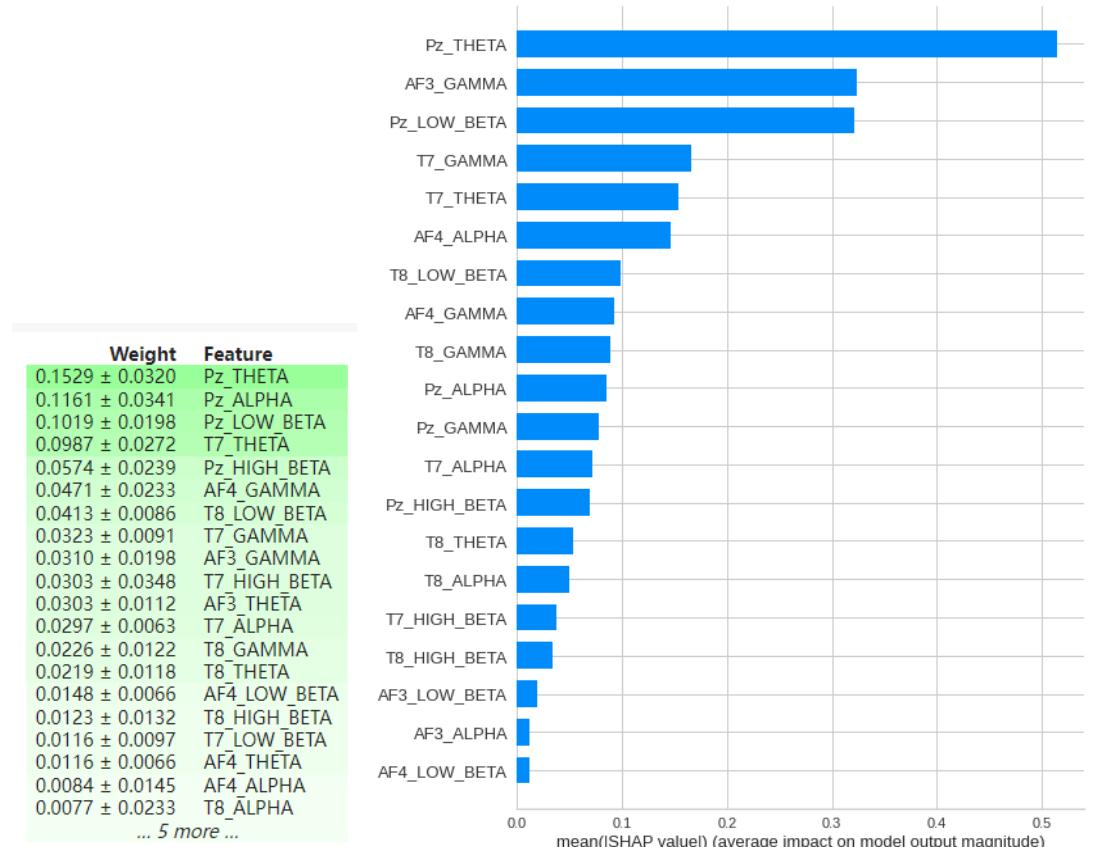


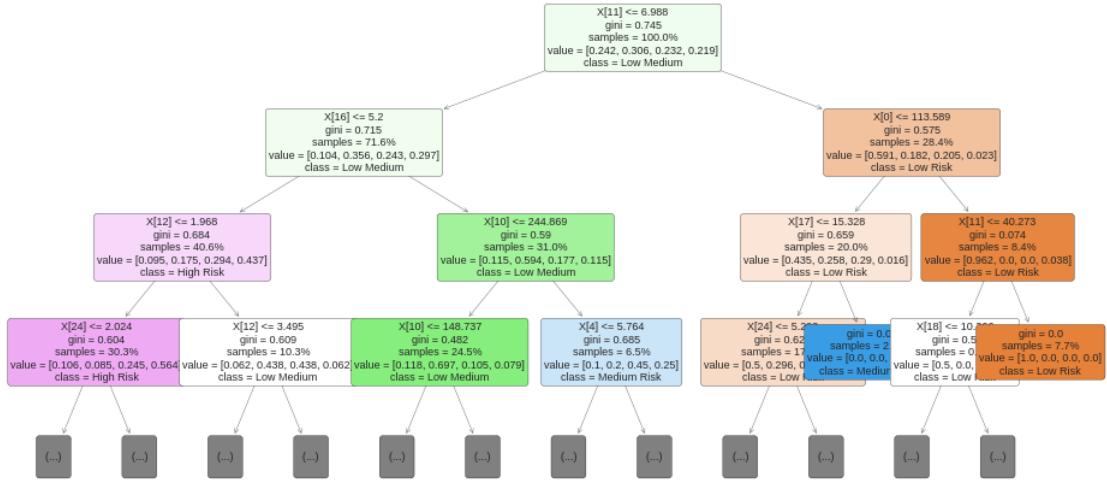




XGBoost

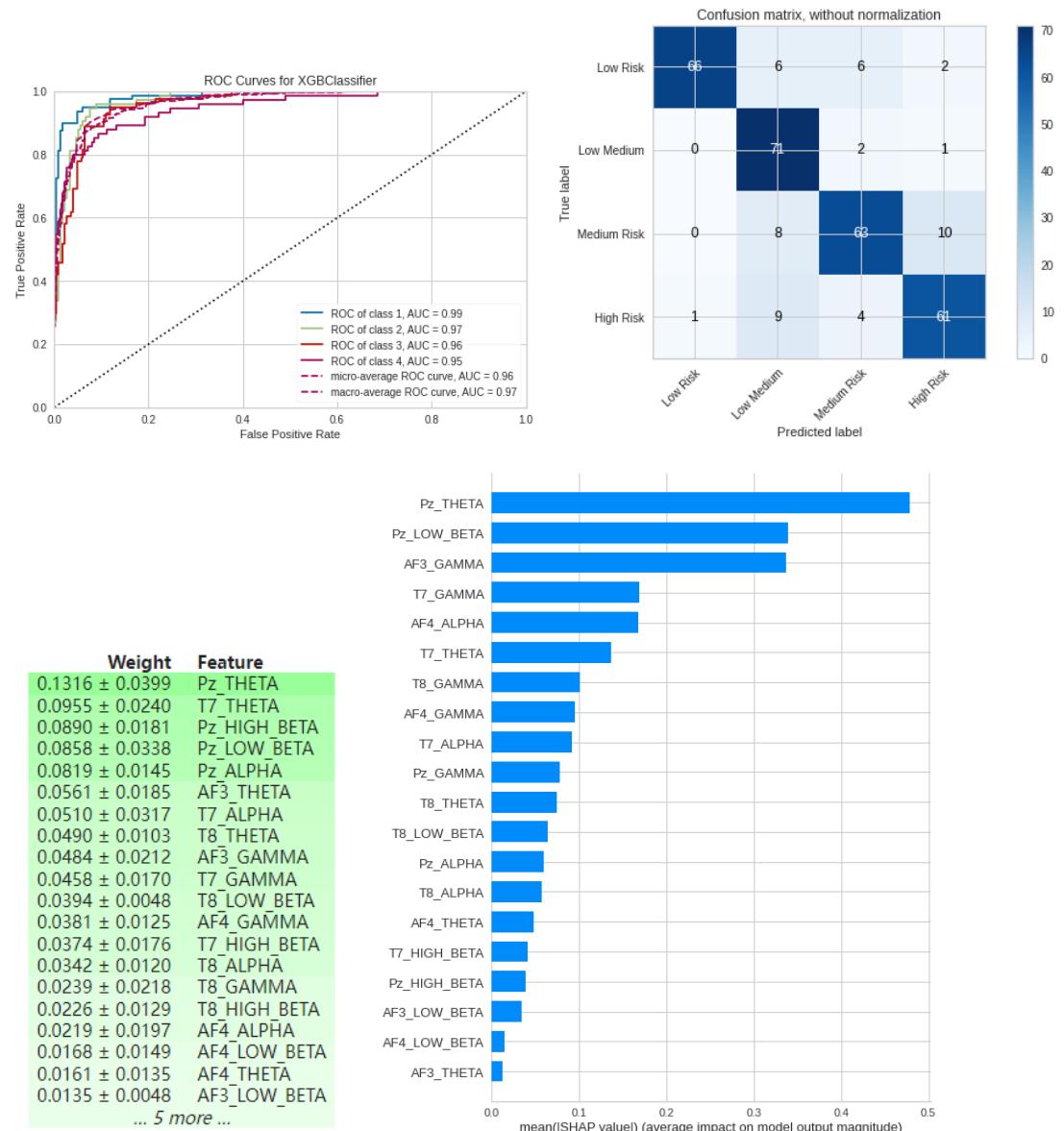
1 Poisoning rate 0%:

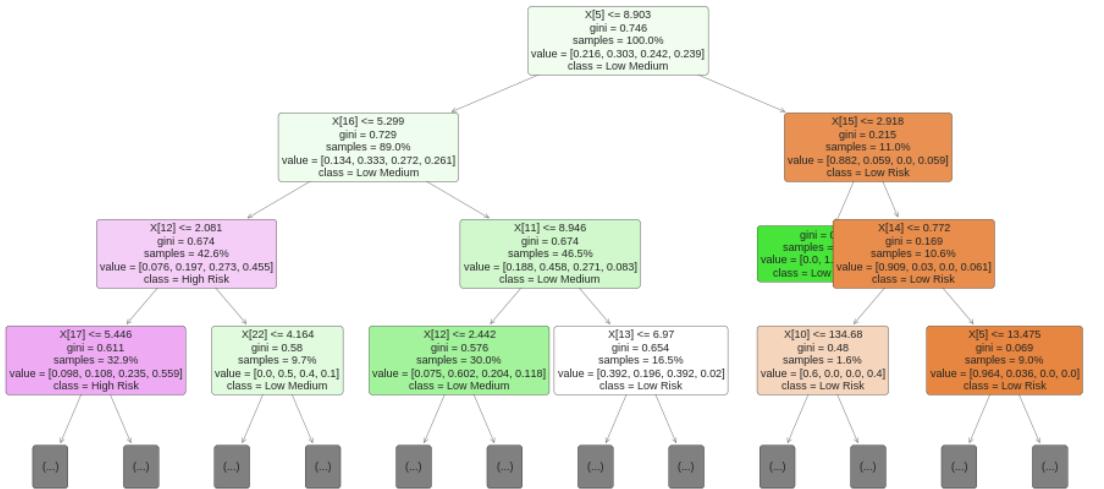




XGBoost

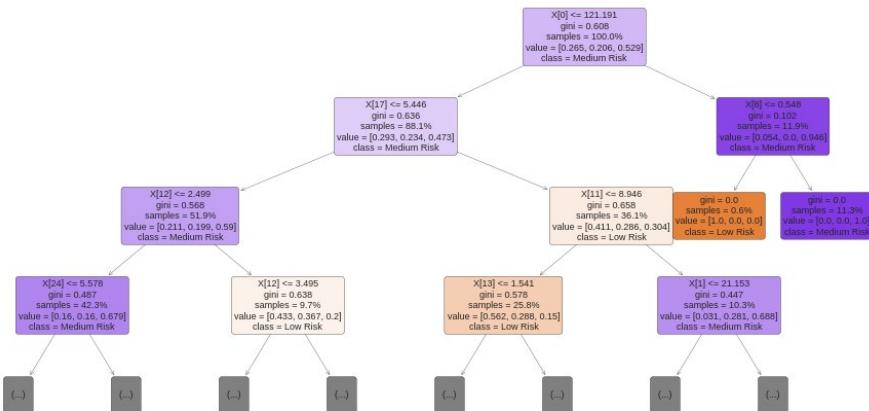
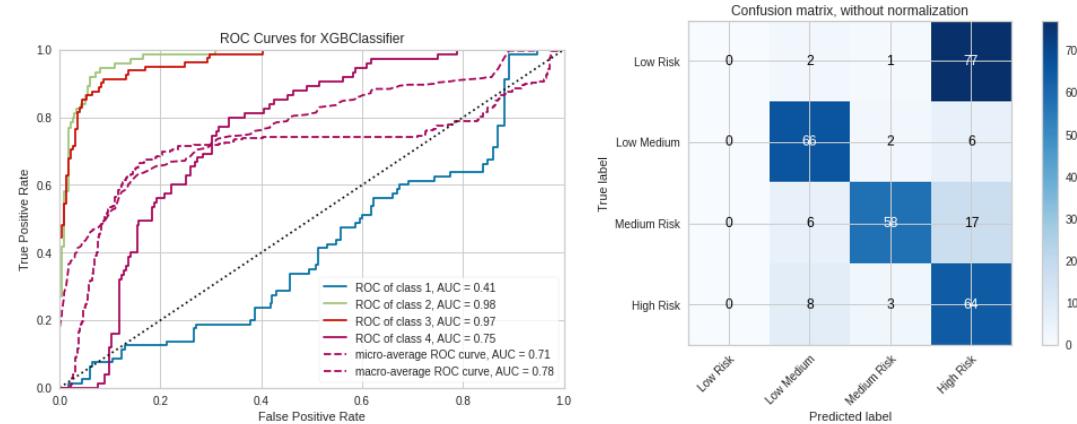
1 Poisoning rate 5%:

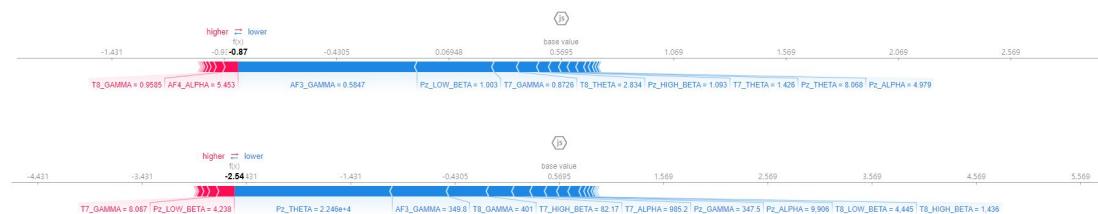
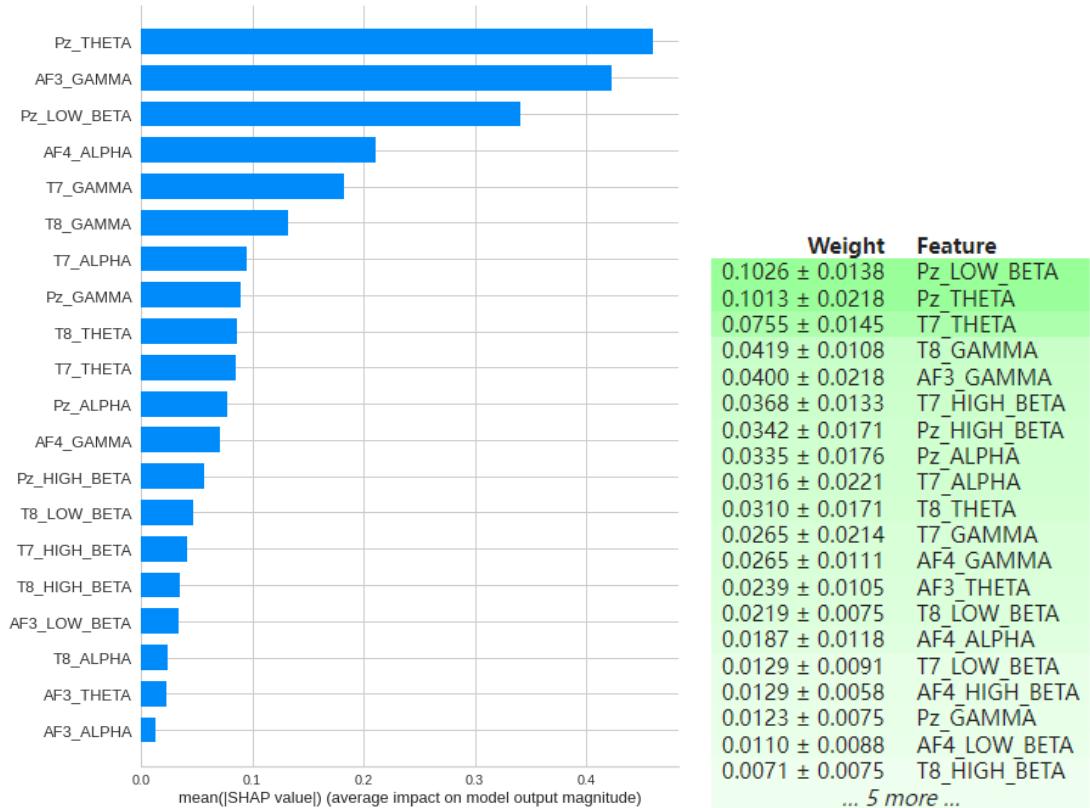




XGBoost

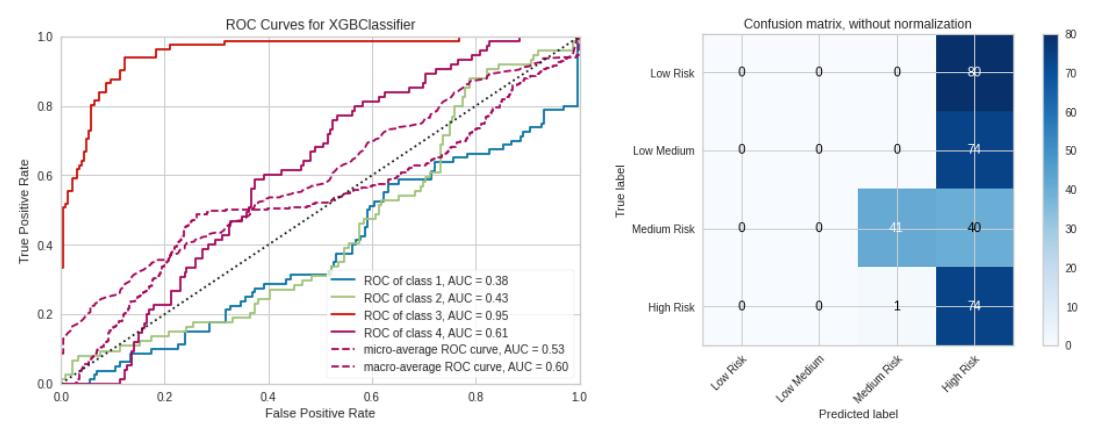
1 Poisoning rate 25%:

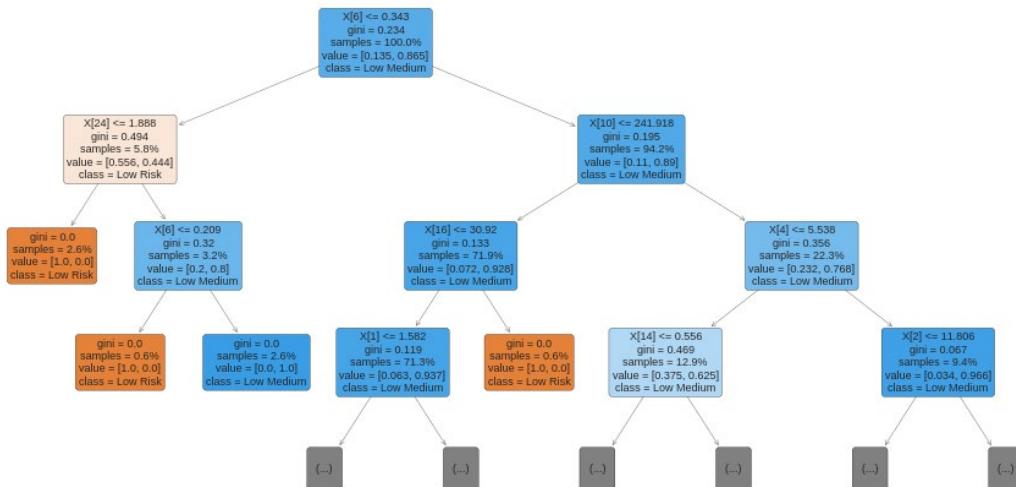
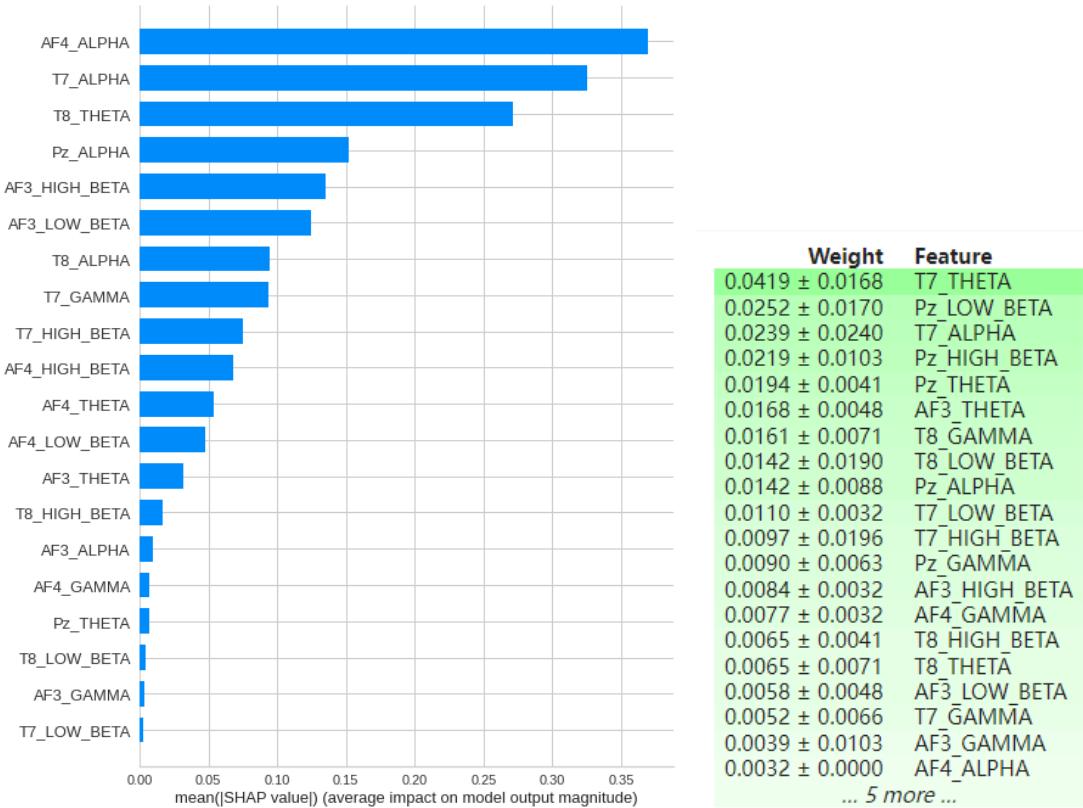




XGBoost

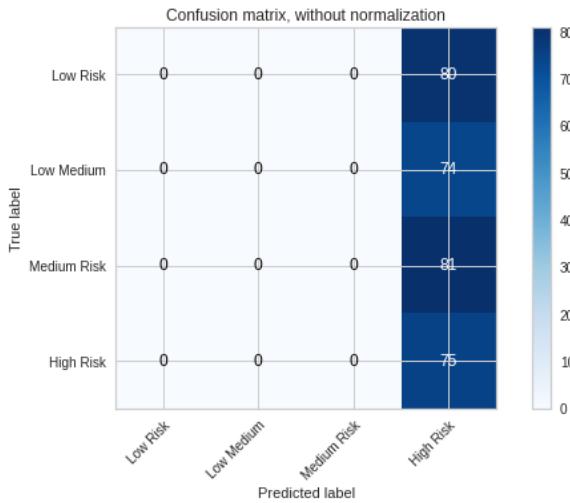
1 Poisoning rate 50%:





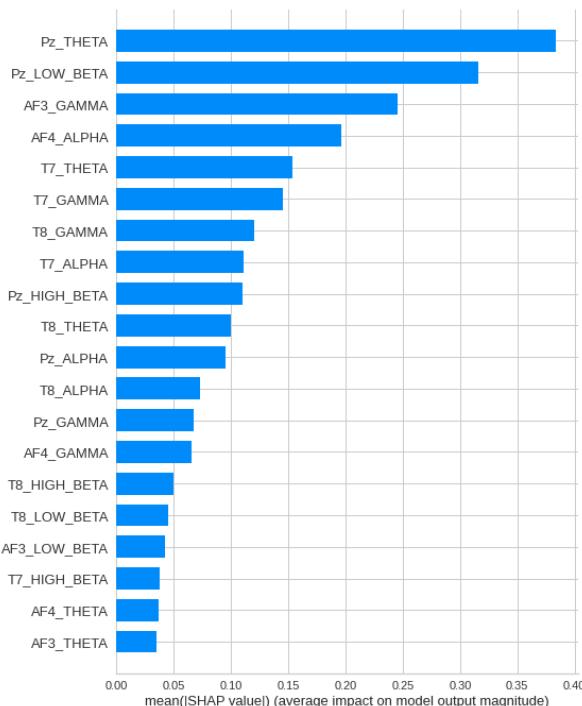
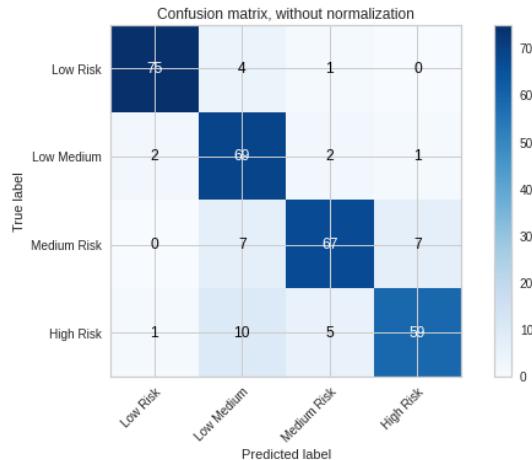
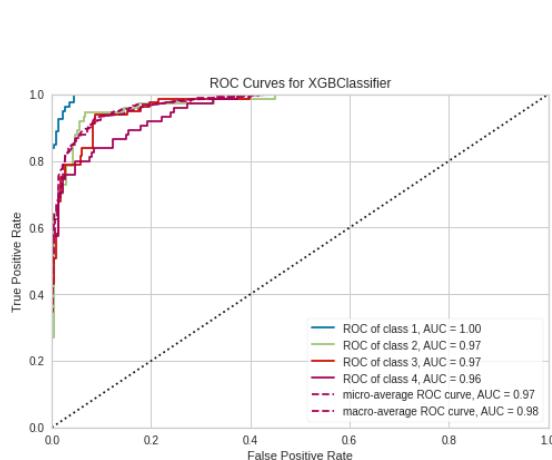
XGBoost

1 Poisoning rate 75%:



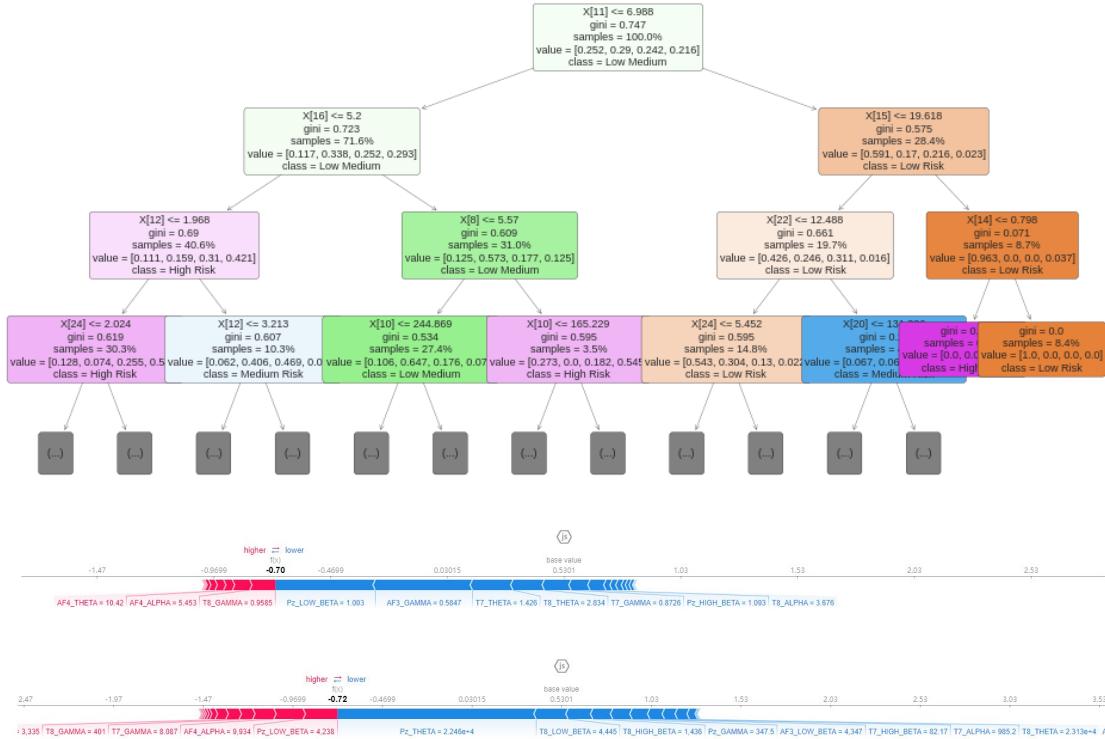
XGBoost

2 Poisoning rate 5%:



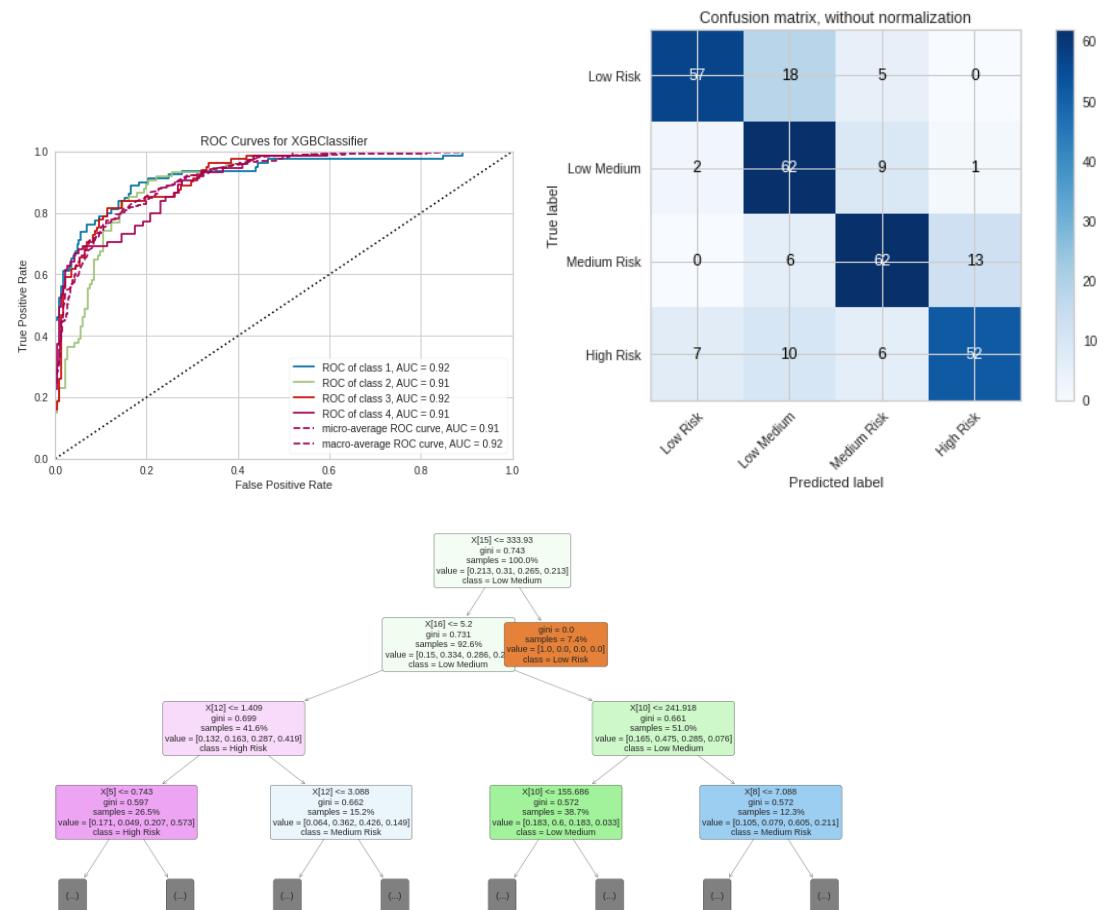
Weight	Feature
0.1232 ± 0.0165	Pz_ALPHA
0.1135 ± 0.0325	Pz_THETA
0.0955 ± 0.0139	Pz_LOW_BETA
0.0781 ± 0.0048	T7_THETA
0.0516 ± 0.0135	Pz_HIGH_BETA
0.0484 ± 0.0100	AF3_THETA
0.0439 ± 0.0198	T7_GAMMA
0.0406 ± 0.0222	T7_ALPHA
0.0361 ± 0.0210	T8_LOW_BETA
0.0316 ± 0.0095	AF4_GAMMA
0.0303 ± 0.0145	T8_GAMMA
0.0303 ± 0.0161	Pz_GAMMA
0.0284 ± 0.0232	T7_HIGH_BETA
0.0277 ± 0.0171	AF3_GAMMA
0.0277 ± 0.0218	T8_ALPHA
0.0271 ± 0.0088	T8_THETA
0.0265 ± 0.0075	AF3_LOW_BETA
0.0194 ± 0.0041	AF4_LOW_BETA
0.0194 ± 0.0212	AF3_ALPHA
0.0142 ± 0.0126	AF4_THETA

... 5 more ...



XGBoost

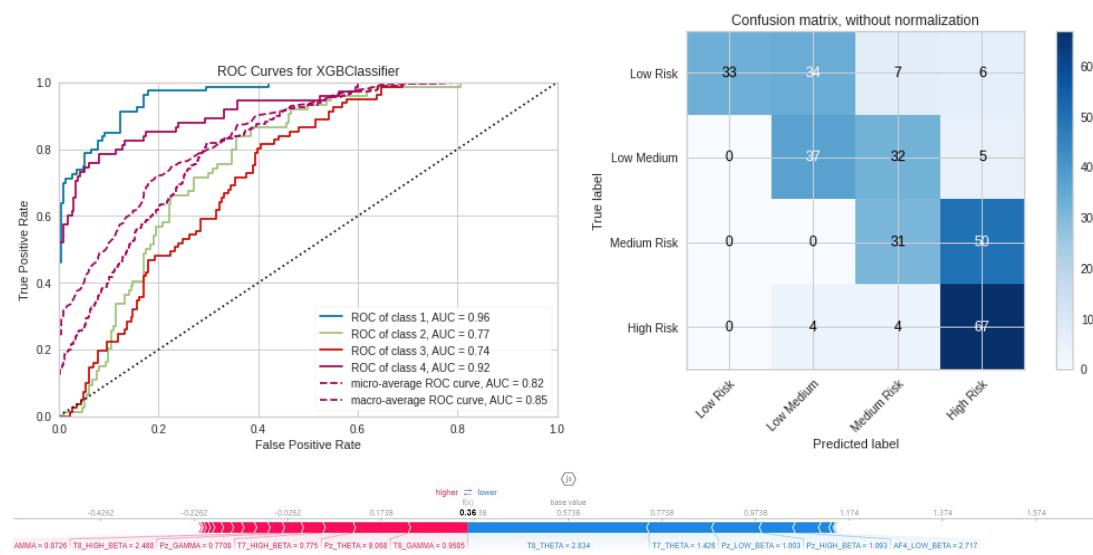
2 Poisoning rate 25%:

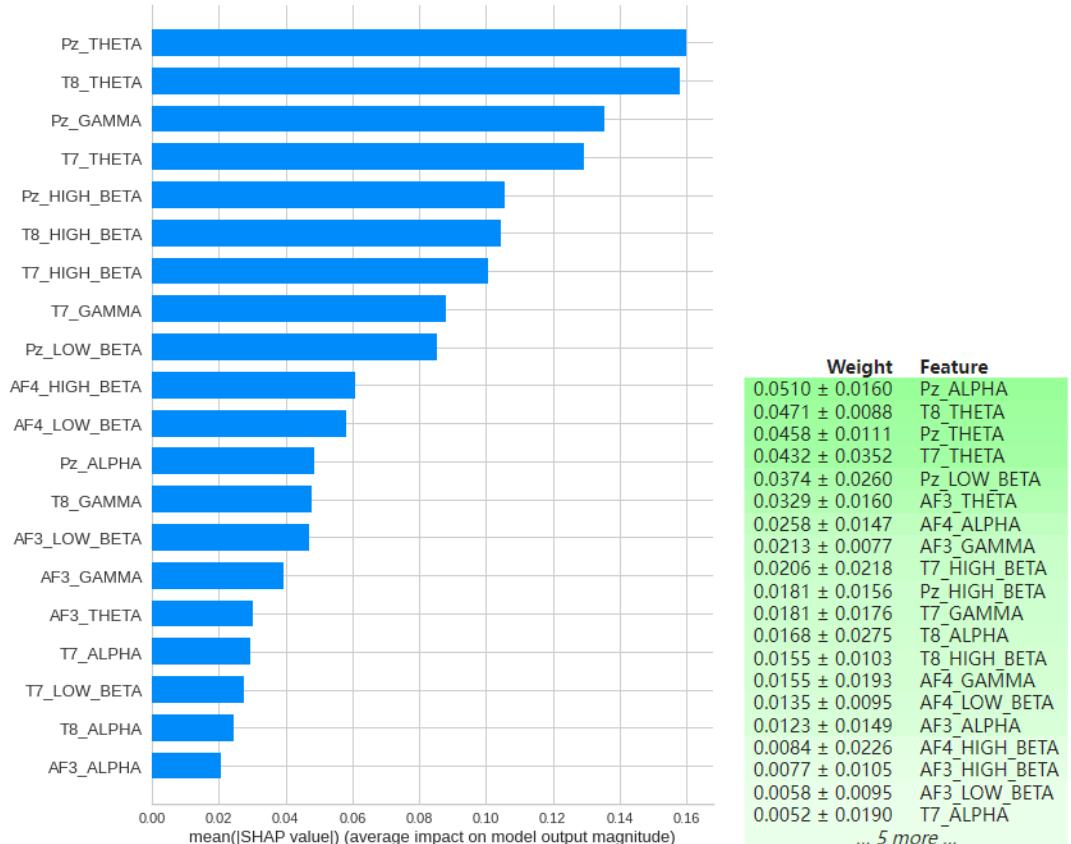
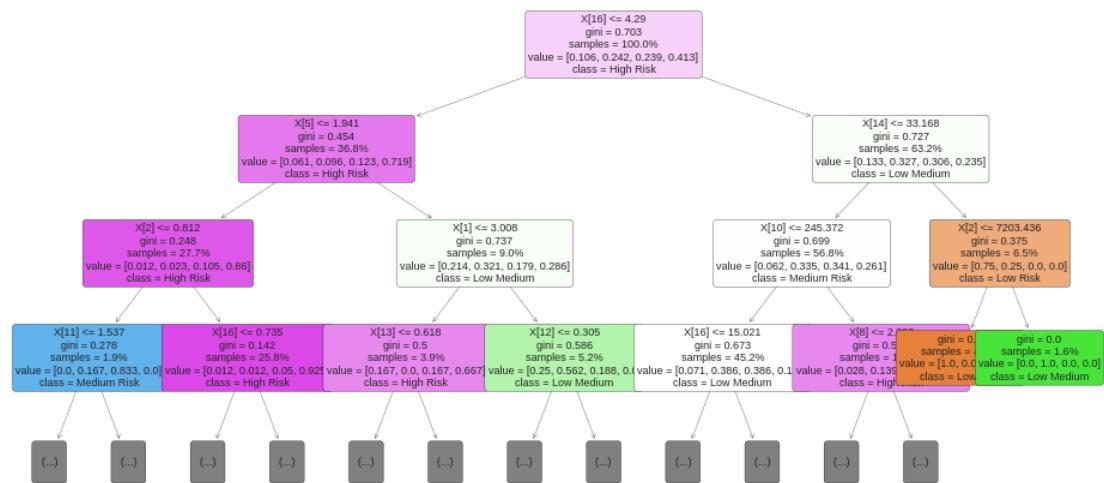




XGBoost

2 Poisoning rate 50%:





XGBoost

2 Poisoning rate 75%:

