A

Confusion Matrix

	HGSC	CCOC	ENOC	LGSC	MUC
HGSC	655	0	28	4	0
CCOC	17	69	4	0	1
ENOC	6	0	53	2	1
LGSC	12	0	0	8	0
MUC	9	0	3	1	21

Prediction / Truth

B

ROC Curve for Up−XGB, Full Set Model in Validation Set

AUC = 0.932

C

Metric	Overall	HGSC	CCOC	ENOC	LGSC	MUC
Accuracy	0.902	0.915	0.975	0.951	0.979	0.983
Sensitivity	0.797	0.937	1.000	0.602	0.533	0.913
Specificity	0.954	0.836	0.973	0.989	0.986	0.985
F1−Score	0.742	0.945	0.862	0.707	0.457	0.737
Balanced Accuracy	0.876	0.886	0.987	0.796	0.760	0.949
Kappa	0.743	0.756	0.849	0.681	0.447	0.729