${\bf Secondary\ Analysis-Figures\ and\ outputs}$

Exploratory analysis for classification

Table 1: Data summary

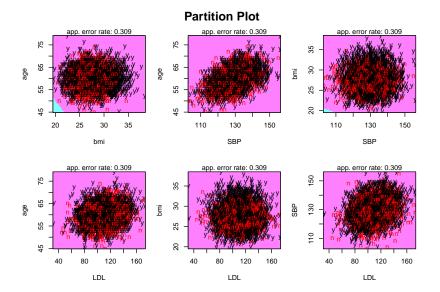
Name Number of rows	Piped data 3603
Number of columns	5005 17
Column type frequency: factor	9
numeric	8
Group variables	None

Variable type: factor

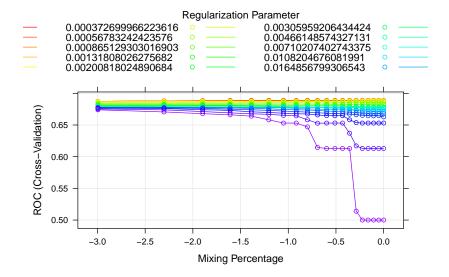
skim_variable	n_missing	$complete_rate$	ordered	n_unique	top_counts
gender	0	1	FALSE	2	0: 1867, 1: 1736
race	0	1	FALSE	4	1: 2350, 3: 720, 4: 358, 2: 175
smoking	0	1	FALSE	3	0: 2176, 1: 1072, 2: 355
hypertension	0	1	FALSE	2	0: 1886, 1: 1717
diabetes	0	1	FALSE	2	0: 3065, 1: 538
vaccine	0	1	FALSE	2	1: 2119, 0: 1484
severity	0	1	FALSE	2	0: 3252, 1: 351
study	0	1	FALSE	3	B: 2201, A: 718, C: 684
length_ind	0	1	FALSE	2	yes: 2491, no: 1112

Variable type: numeric

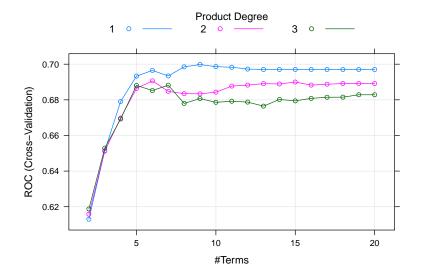
skim_variable n	_missing complete	_rat	e mean	sd	p0	p25	p50	p75	p100	hist
id	0	1	4979.49	2845.35	2.0	2528.0	4987.0	7438.0	9999.0	
age	0	1	60.10	4.46	45.0	57.0	60.0	63.0	79.0	
height	0	1	170.02	5.93	148.1	166.1	170.0	173.9	189.1	
weight	0	1	79.91	7.08	57.1	75.0	79.9	84.7	104.2	
bmi	0	1	27.71	2.77	19.6	25.8	27.6	29.4	38.4	
SBP	0	1	130.01	7.88	103.0	125.0	130.0	135.0	156.0	
LDL	0	1	110.51	19.83	32.0	97.0	111.0	125.0	173.0	
recovery_time	0	1	42.98	29.46	2.0	28.0	39.0	50.0	365.0	



Penalized logistic regression

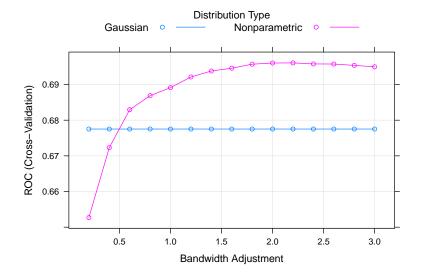


Multivariate adaptive regression splines classifier (MARS)

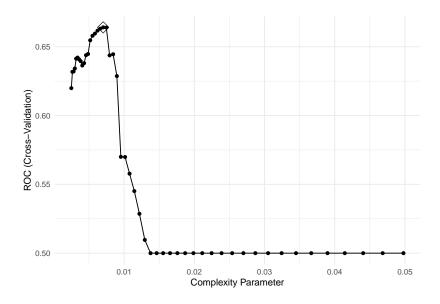


Quadratic discriminant analysis (QDA)

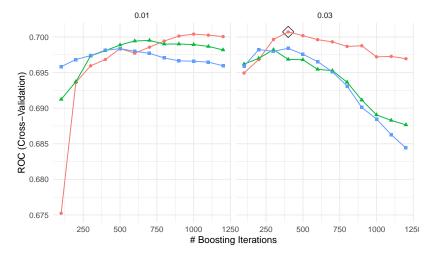
Naive Bayes Classifer



Classification Tree

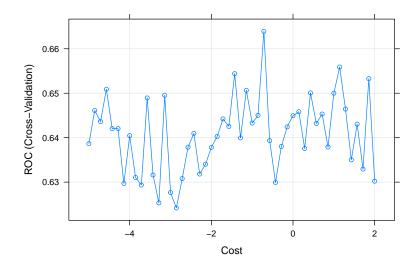


Adaptive boosting classfier



Max Tree Depth → 1 → 2 → 3

Support vector classifier with linear kernel



Support vector classifier with radial kernel

