

Results to date

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Model	Training accuracy	Testing Accuracy
Class probabilities model		
Naive Bayes		
Passenger class	0.6161616	0.62679
Age	0.617284	0.62201
Sex	0.7867565	0.76555
Class, Sex, Embarked	0.77778	0.73684
Kitchen Sink	0.80247	0.67464
k-Nearest Neighbors		
Age, k = 1	0.67677	0.57416
Fare, k = 1	0.80696	0.64115
Age, Fare, SibSp, k = 5	0.76431	0.61244
Sex, Pclass, k = 5	0.77441	0.76555
Sex, Pclass, Age, k = 1	0.8642	0.73206
Sex, Pclass, Age, k = 5	0.81818	0.73206
Sex, Pclass, Age, k = 9	0.80808	0.74641
Sex, Pclass, Age, k = 13	0.80359	0.74163
Sex, Pclass, Age, k = 17	0.79798	0.75120
Sex, Pclass, Age, k = 21	0.78788	0.77033
Sex, Pclass, Age, k = 25	0.77890	0.76555
k-Nearest Neighbors, binomial for missing test obs		
Sex, Age, Pclass_ordered, Sex:Pclass_ordered	0.8096244	0.68421

Model	Training accuracy	Testing Accuracy
Sex, Age, Pclass_unordered, Sex:Pclass_unordered	0.8096244	0.68421
k-Nearest Neighbors , 0s for missing test obs		
Sex, Age, Pclass_ordered, Sex:Pclass_ordered	0.8096244	0.74641
Sex, Age, Pclass_unordered, Sex:Pclass_unordered	0.8096244	0.74163
k-Nearest Neighbors , scrambled 0 / 1s for missing test obs		
Sex, Age, Pclass_ordered, Sex:Pclass_ordered	0.8096244	0.69378
Sex, Age, Pclass_unordered, Sex:Pclass_unordered	0.8096244	0.68421
random forest mtry picked with CV, Pclass, Sex, Age, Fare, Embarked	.8123648	0.77033