

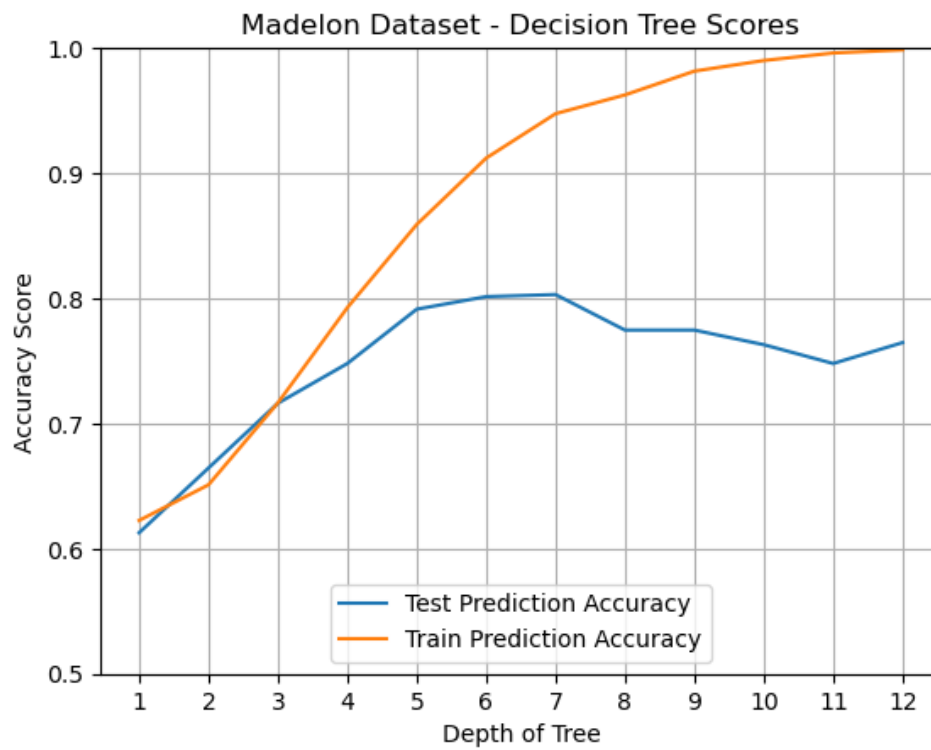
# Homework 1

Evan Stansell

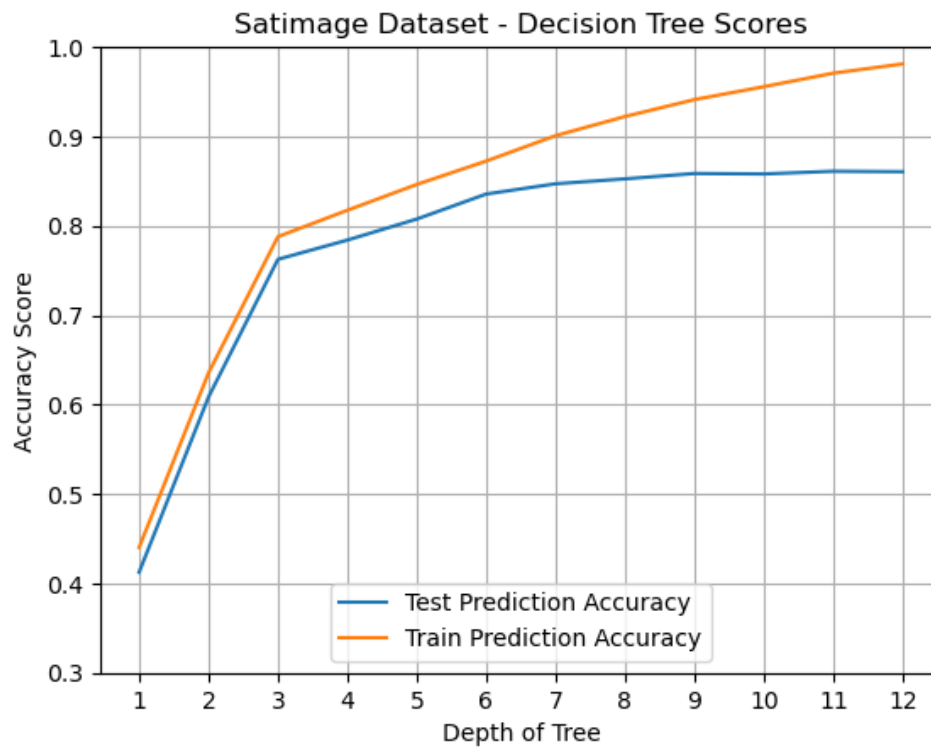
EJS22a

Table of values at end.

(a)



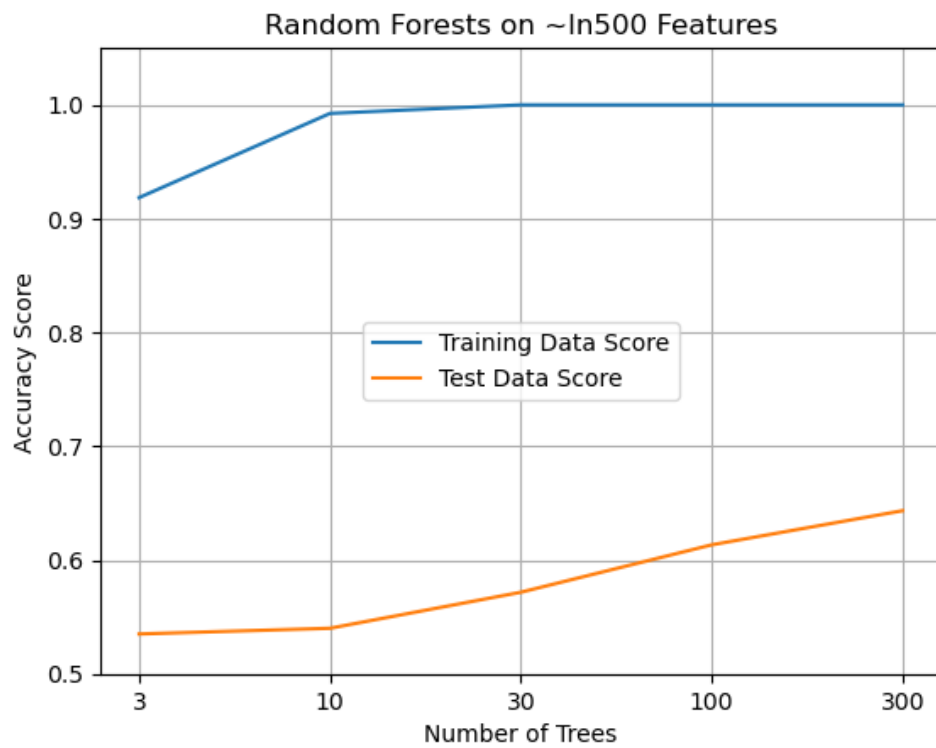
(b)



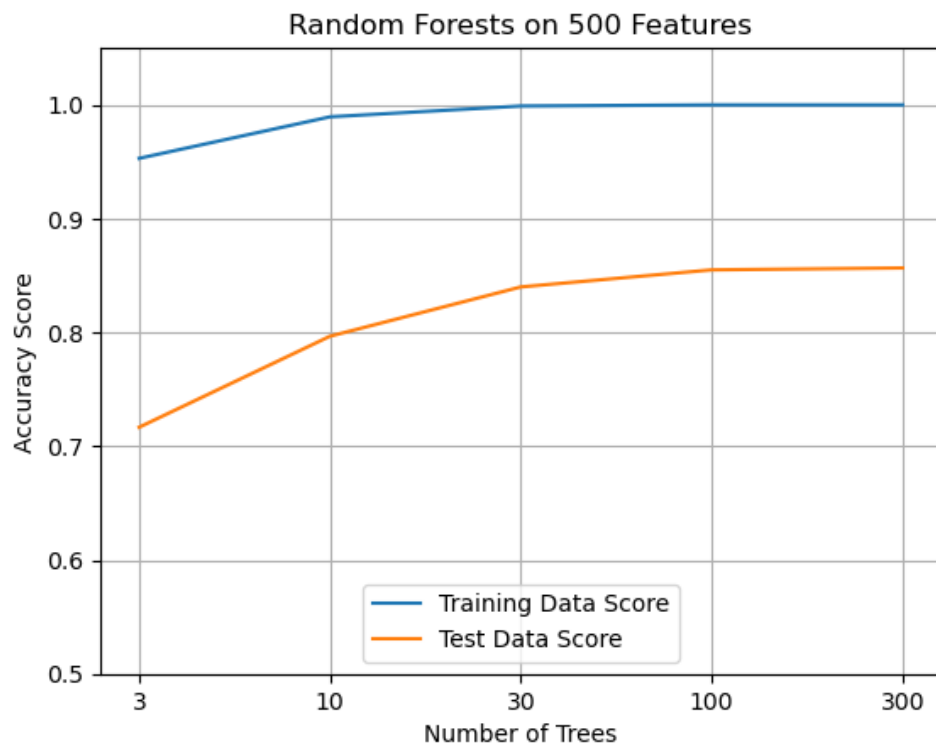
(c)



(d)



(e)



NAME	ERROR %	Depth or Trees	Dataset	Train/Valid
Madelon Decision Tree	19.7	7	Madelon	Valid
Satimage Decision Tree	14.0	12	Satimage	Valid
Madelon Random Forest ~ sqrt500 features	7.5	3	Madelon	Train
Madelon Random Forest ~sqrt500 features	1.0	10	Madelon	Train
Madelon Random Forest ~sqrt500 features	0.0	30	Madelon	Train
Madelon Random Forest ~sqrt500 features	0.0	100	Madelon	Train
Madelon Random Forest ~sqrt500 features	0.0	300	Madelon	Train
Madelon Random Forest ~sqrt500 features	42	3	Madelon	Test
Madelon Random Forest ~sqrt500 features	37.8	10	Madelon	Test
Madelon Random Forest ~sqrt500 features	32.0	30	Madelon	Test
Madelon Random Forest ~sqrt500 features	27.7	100	Madelon	Test
Madelon Random Forest ~sqrt500 features	28.3	300	Madelon	Test

Madelon Random Forest ~ln500 features	8.2	3	Madelon	Train
Madelon Random Forest ~ln500 features	0.7	10	Madelon	Train
Madelon Random Forest ~ln500 features	0.0	30	Madelon	Train
Madelon Random Forest ~ln500 features	0.0	100	Madelon	Train
Madelon Random Forest ~ln500 features	0.0	300	Madelon	Train
Madelon Random Forest ~ln500 features	46.5	3	Madelon	Test
Madelon Random Forest ~ln500 features	46.0	10	Madelon	Test
Madelon Random Forest ~ln500 features	42.8	30	Madelon	Test
Madelon Random Forest ~ln500 features	38.7	100	Madelon	Test
Madelon Random Forest ~ln500 features	35.7	300	Madelon	Test
Madelon Random Forest 500 features	4.7	3	Madelon	Train
Madelon Random Forest 500 features	1.0	10	Madelon	Train
Madelon Random Forest 500 features	0.1	30	Madelon	Train

Madelon Random Forest 500 features	0.0	100	Madelon	Train
Madelon Random Forest 500 features	0.0	300	Madelon	Train
Madelon Random Forest 500 features	28.3	3	Madelon	Test
Madelon Random Forest 500 features	20.3	10	Madelon	Test
Madelon Random Forest 500 features	16.0	30	Madelon	Test
Madelon Random Forest 500 features	14.6	100	Madelon	Test
Madelon Random Forest 500 features	14.3	300	Madelon	Test