

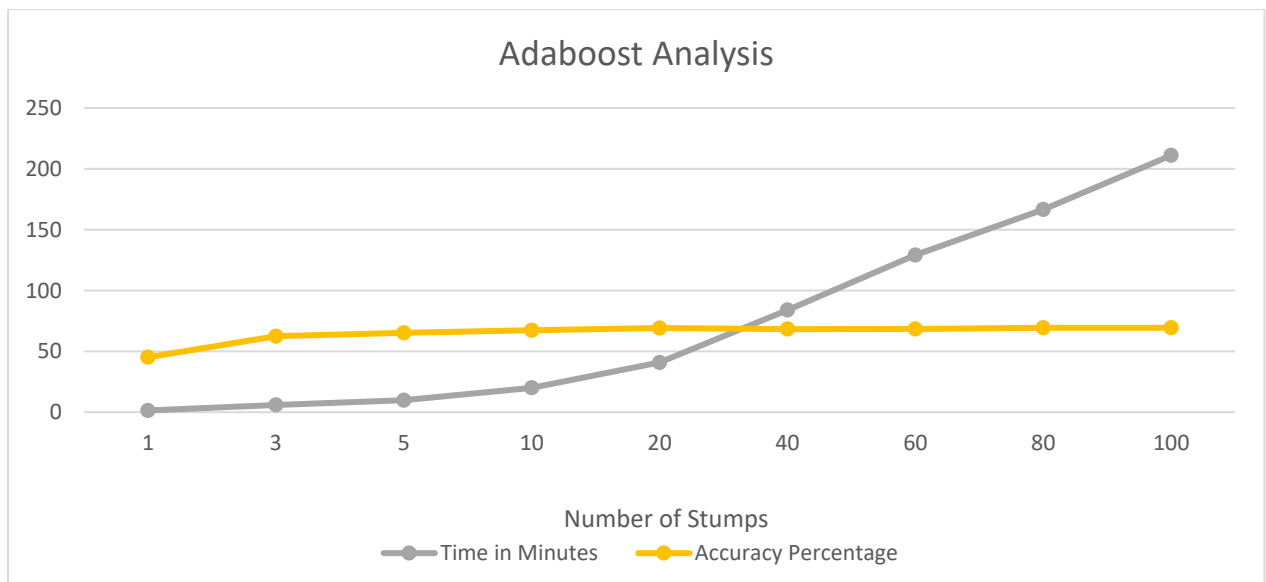
Analysis Document

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ADABOOST:

We tested the adaboost model for different value of decision stumps. The accuracy and the time taken for different values of decision stumps is as given below:

Stump count	Time in Minutes	Accuracy Percentage
1	1.417	45.17
3	5.979216667	62.46
5	9.824416667	65.22
10	20.05806667	67.34
20	40.89778333	69.14
40	83.97496666	68.29
60	129.12625	68.4
80	166.5615333	69.35
100	211.010066	69.35



Adaboost for 3 decision stumps

Adaboost								
		0		90		180		270
<hr/>								
0		159		28		28		24
<hr/>								
90		45		128		25		26
<hr/>								
180		32		39		142		23
<hr/>								
270		38		29		30		147
<hr/>								

Adaboost for 40 decision stumps

Adaboost								
		0		90		180		270

0		173		13		36		17

90		40		143		23		18

180		46		19		160		11

270		39		19		18		168

Adaboost for 60 decision stumps

Adaboost								
		0		90		180		270
0		166		15		39		19
90		22		156		22		24
180		35		28		153		20
270		36		23		15		170

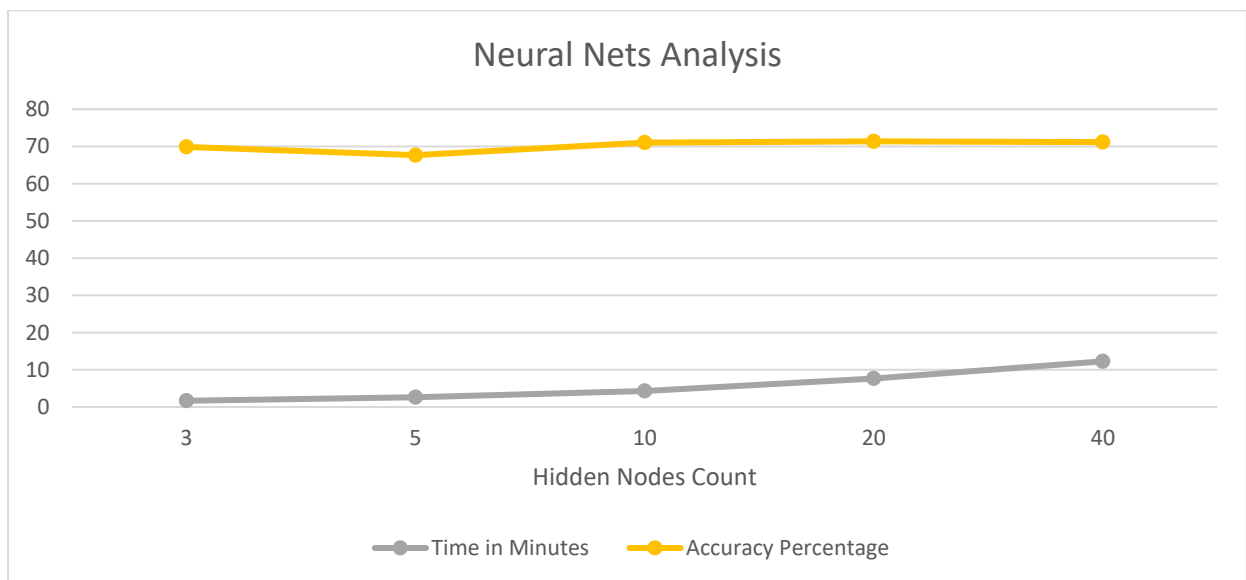
Adaboost for 80 decision stumps

Adaboost								
		0		90		180		270
0		177		24		23		15
90		22		162		15		25
180		41		30		144		21
270		29		28		16		171

Neural Network:

We tested the neural network model for different value of decision stumps. The accuracy and the time taken for different values of decision stumps is as given below:

Hidden Nodes	Time in Minutes	Accuracy Percentage
3	1.69028	69.88
5	2.624766	67.66
10	4.301	71.05
20	7.65745	71.37
40	12.275	71.16



Neural Network for 5 hidden nodes:

		0		90		180		270
0		136		17		14		72
90		3		153		6		62
180		12		17		133		74
270		5		20		3		216

Neural Network for 10 hidden nodes:

		0		90		180		270
0		176		21		21		21
90		25		162		11		26
180		42		27		149		18
270		32		20		9		183

Neural Network for 20 hidden nodes:

		0		90		180		270
0		160		30		14		35
90		10		178		3		33
180		28		36		136		36
270		11		31		3		199

Neural Network for 40 hidden nodes:

		0		90		180		270
0		165		21		23		30
90		15		168		8		33
180		34		26		150		26
270		20		27		9		188