

Charles Hancock

Question 5:

Pen Data Avg, Max, Stdev: 0.785363064608, 0.817610062893, 0.0227515503703

Car Data Avg, Max, Stdev: 0.678403141361, 0.71335078534, 0.022924823779

Question 6:

So clearly adding hidden layers increases accuracy GREATLY up until about 10 layers, then afterwards it simply makes the readouts more reliable, as evidenced by the reduction in standard deviation that occurs.

Data and Tables below.

Hidden layer 0

Pen Data Avg, Max, Stdev: 0.06243567753, 0.10405946255, 0.0509785172312

Car Data Avg, Max, Stdev: 0.610471204188, 0.708115183246, 0.0953858955302

HL 5

Pen Data Avg, Max, Stdev: 0.612407089766, 0.692967409949, 0.0748786408196

Car Data Avg, Max, Stdev: 0.610471204188, 0.708115183246, 0.0953858955302

HL 10

Pen Data Avg, Max, Stdev: 0.783304745569, 0.804745568897, 0.0186088560619

Car Data Avg, Max, Stdev: 0.683507853403, 0.746727748691, 0.0469649121011

HL 15

Pen Data Avg, Max, Stdev: 0.801143510577, 0.856489422527, 0.0446879339713

Car Data Avg, Max, Stdev: 0.684554973822, 0.748691099476, 0.0417516699155

HL 20

Pen Data Avg, Max, Stdev: 0.787535734706, 0.831046312178, 0.0453201821502

Car Data Avg, Max, Stdev: 0.688481675393, 0.708769633508, 0.0108093313205

HL 25

Pen Data Avg, Max, Stdev: 0.792109777015, 0.815323041738, 0.0217127035047

Car Data Avg, Max, Stdev: 0.668062827225, 0.695680628272, 0.0222797785226

HL 30

Pen Data Avg, Max, Stdev: 0.785591766724, 0.846769582619, 0.0384889421233

Car Data Avg, Max, Stdev: 0.681544502618, 0.70942408377, 0.0204440038358

HL 35

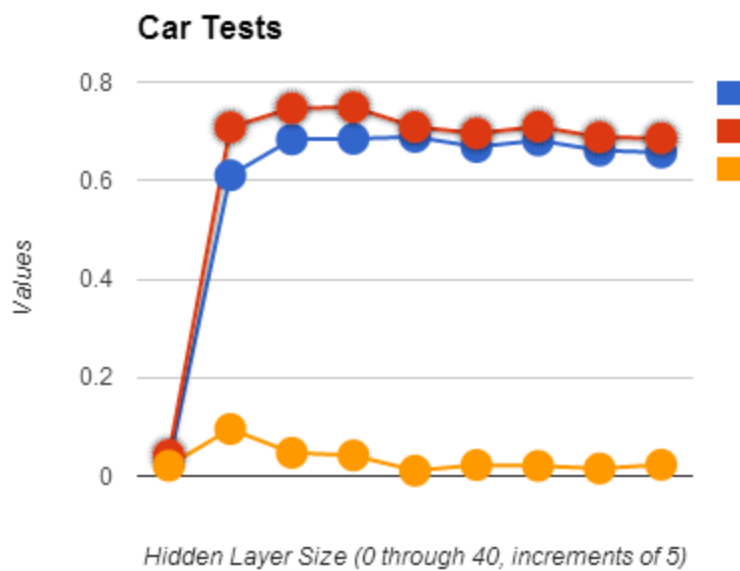
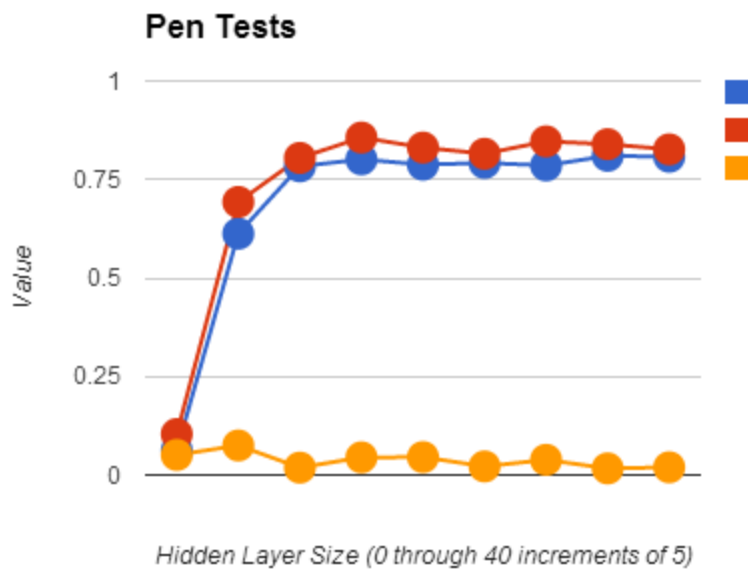
Pen Data Avg, Max, Stdev: 0.810120068611, 0.839622641509, 0.0166942753694

Car Data Avg, Max, Stdev: 0.660863874346, 0.687827225131, 0.0151595319413

HL 40

Pen Data Avg, Max, Stdev: 0.807718696398, 0.826472269868, 0.0194955977791

Car Data Avg, Max, Stdev: 0.656806282723, 0.685863874346, 0.0228162048907



Blue: Average

Red: Max

Yellow: Std Deviation (couldn't get increment labels to show up properly)