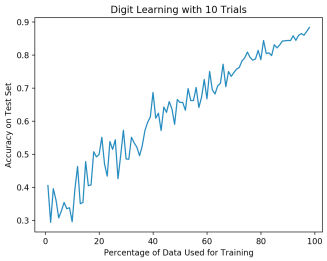
Machine Learning Toolbox – Harris Davidson

I know this is supposed to be a text file, but I like pictures.

What is the general trend in the curve?

At first pass with low numbers of trials (10 or fewer) it looked like a linear trend. However, when run with more trials (1000) the trend refines into what looks like a logarithmic growth.

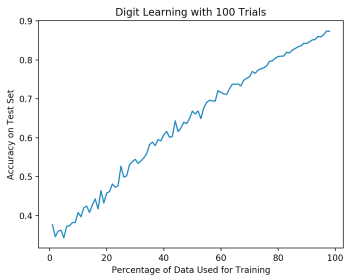


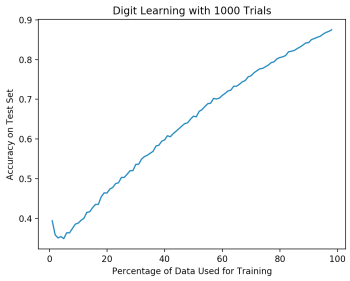
Are there parts of the curve that appear to be noisier than others? Why?

There appears to be more noise the less data is used for training. It would make sense that this noise is caused by a wide variety of classification quality based upon which data the algorithm was trained on when using a relatively small data set. I expect to see noise around the upper end (based on a small sample of test cases) but saw no such trend.

How many trials do you need to get a smooth curve?

What counts as smooth? At 1000 trials I would call it smooth as the noise is dramatically quieter than the quietest feature (at least I believe so).





Try different values for C. What happens?

Increasing C makes the trend more logarithmic, while decreasing C makes the trend more linear.