

ML report

2017.03.15

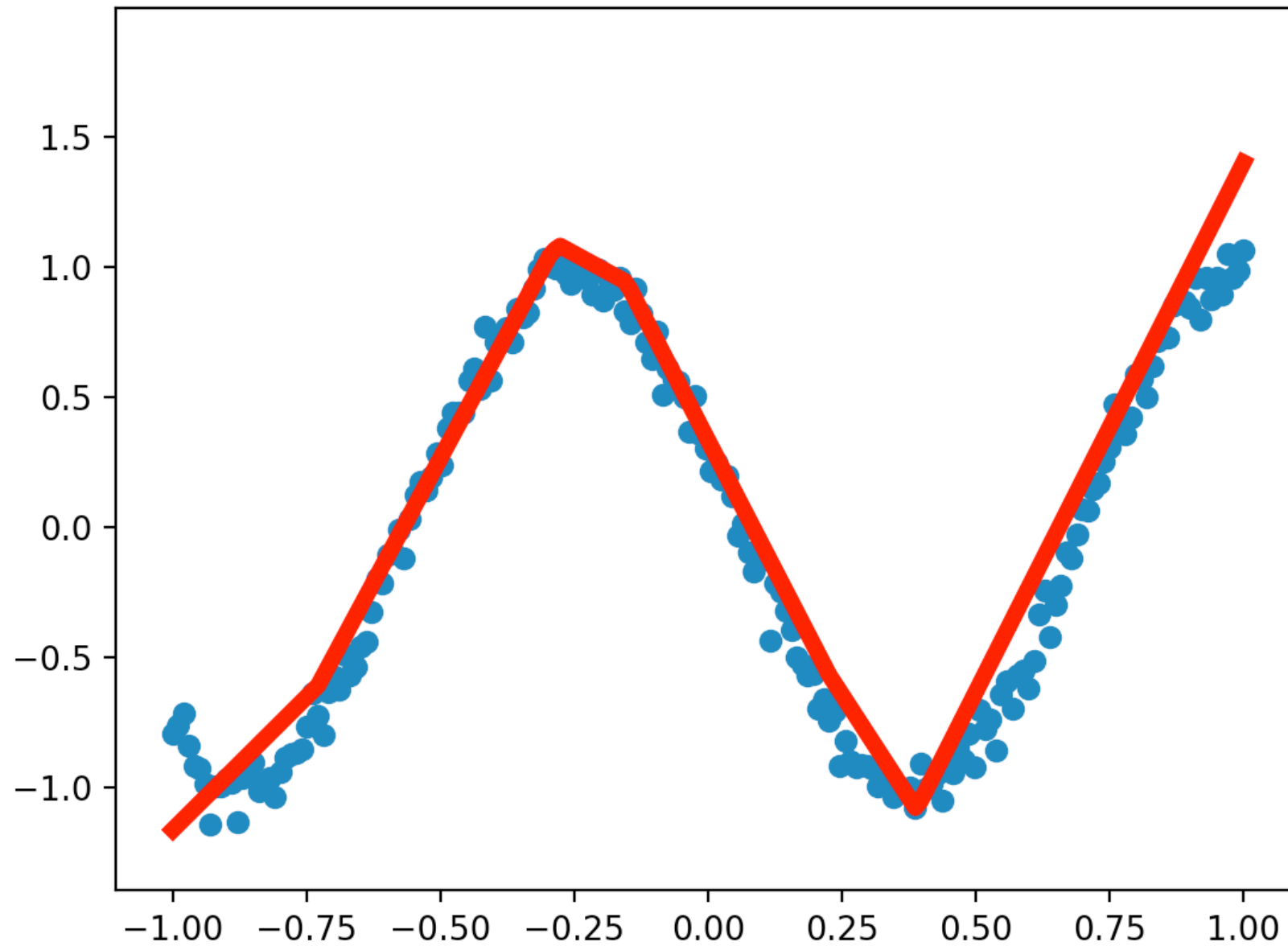
editor : 張之芃 GC

What I've done

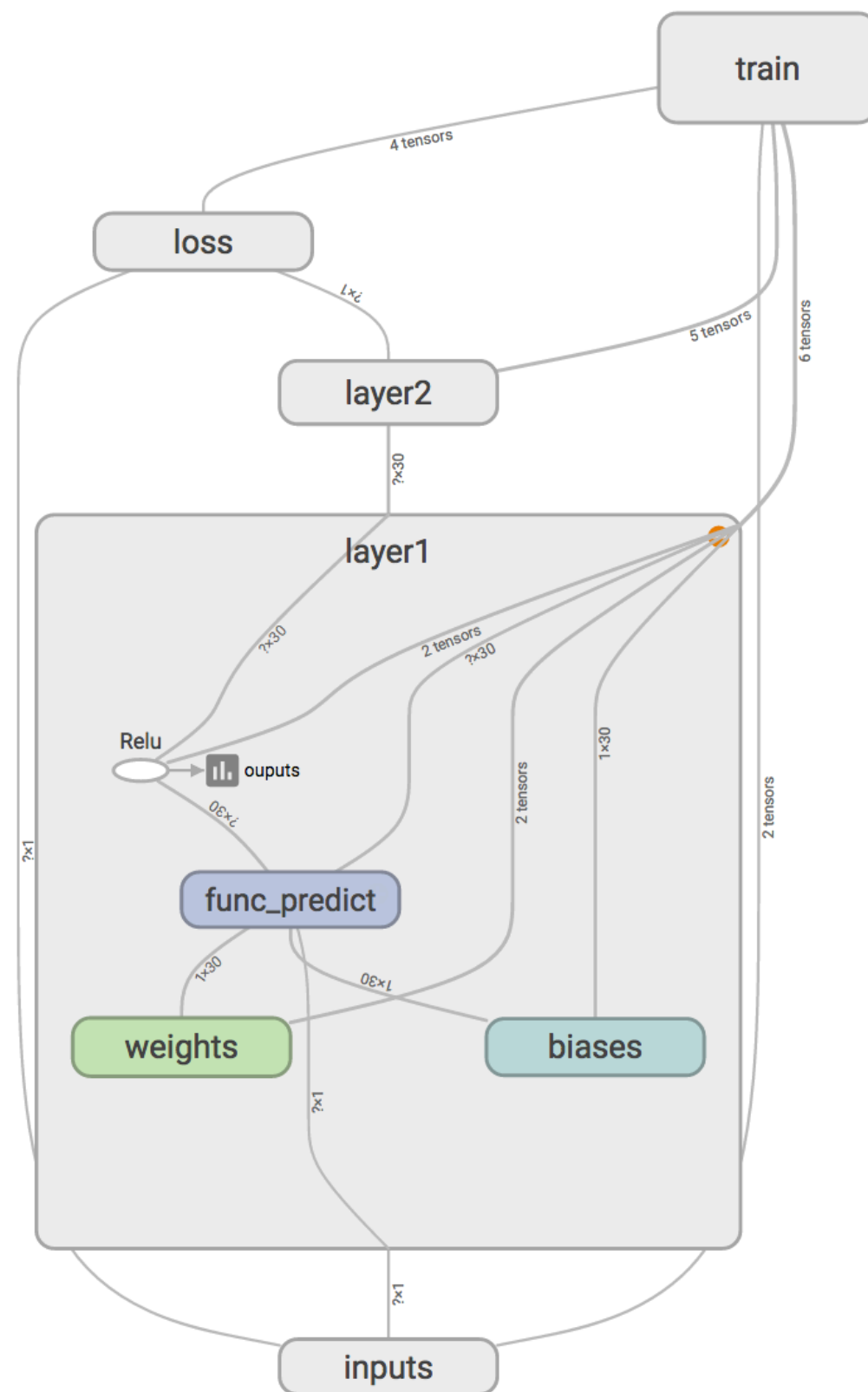
- Learning the basic of machine learning
- Practicing basic python syntax with modules
- Doing practices with python
- Start to do HW1 from ML online courses

About the tools

- Numpy — a powerful mathematic compute module
- Pandas — module using to reading data from files
- Matplotlib — module using to graph
- Tensorflow — machine learning module powered by Google

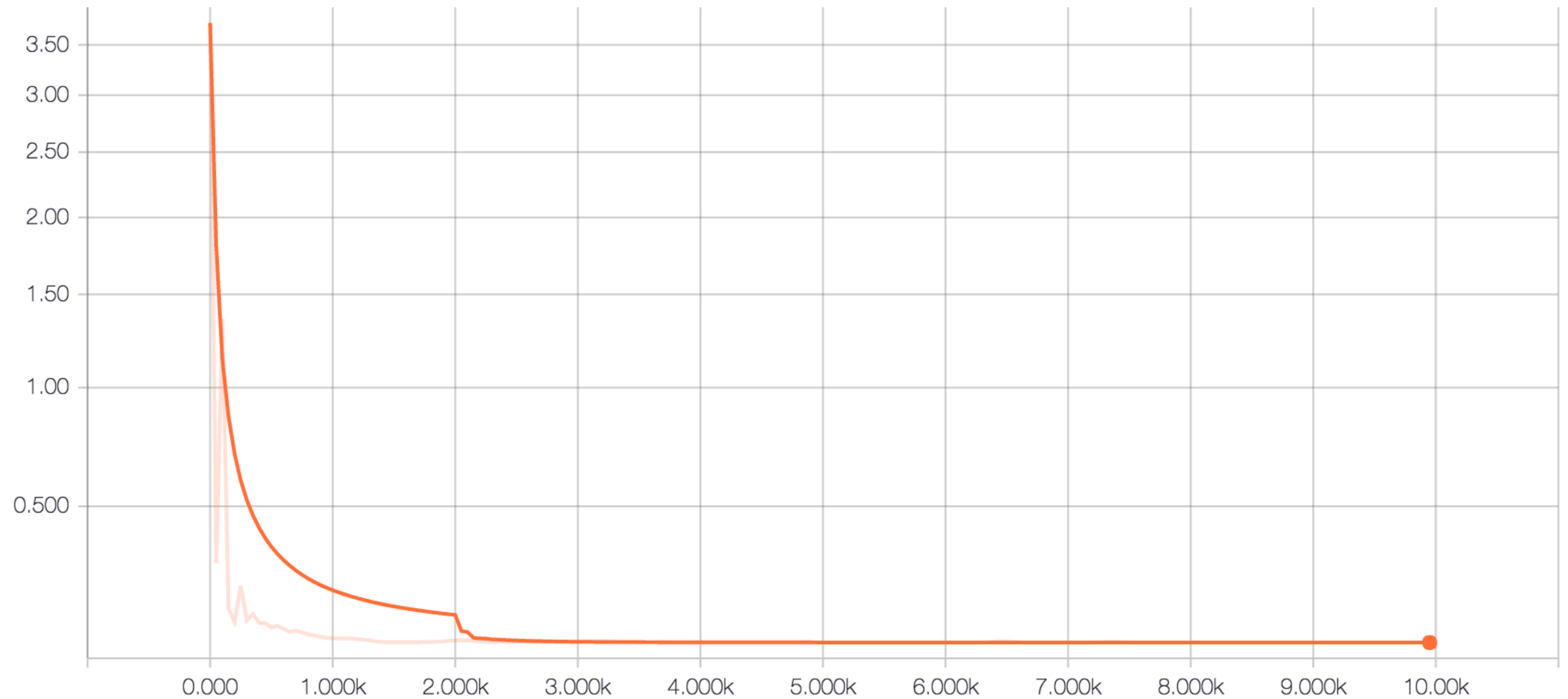


A practice using function $\cos()$ with noises to make machine learn the graph's pattern



The structure of the neural network for function prediction

- ReLU — activation function for approximating
- loss — produce the error to train the network



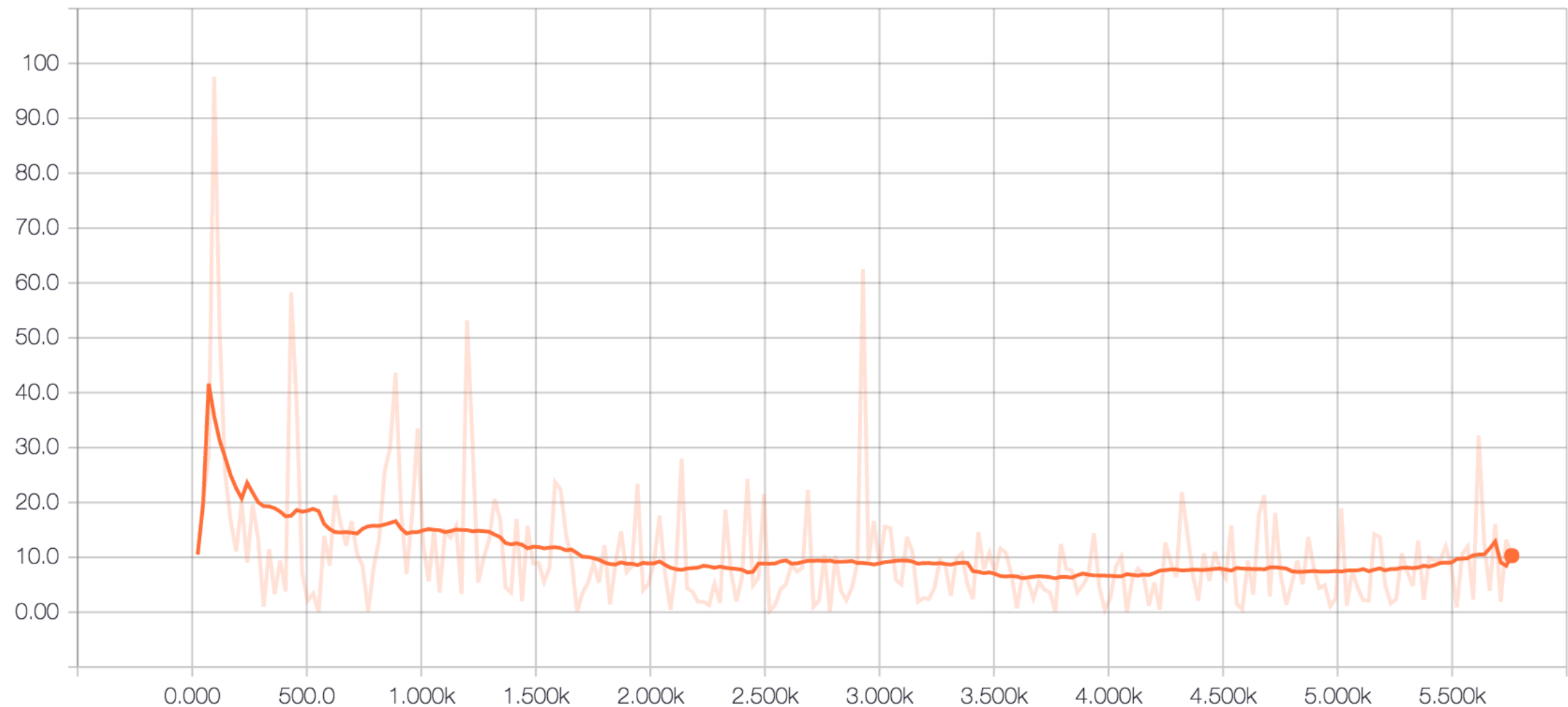
The loss of prediction

The training is 10k times in total and record
loss every 50 times

What I've learnt

- Knowing the basic element in ML
- And a few technique making predict more precisely
- Knowing which part need to keep studying

Still working on....



Train with 5760 datas and record every 24 times

The loss isn't decrease stably in HW1
Still looking for possibly solution