**Chapter 9: Deep Neural Network**

Theoretical part of general networks:

1. Introduction to Neurons

Andrew's first three courses-videos only-attached to a folder (about two days)

(The exercises are attached to each week.)

Andrew’s fourth course is intended for CV users.

1. Introduction to Pytorch

Go through the following tutorials:

<https://courses.analyticsvidhya.com/courses/introduction-to-pytorch-for-deeplearning?utm_source=blog&utm_medium=introduction-to-pytorch-from-scratch>

[Pytorch Tutorial for Beginners](https://www.kaggle.com/krishanudb/pytorch-tutorial-for-beginners)

Other general networks:

Theoretical part - RNN

View Andrew's fifth course-videos only-attached to the folder (today)

Read the next post by head of AI of Tesla, which gives a list of rules to build and practice neurons networks:

<http://karpathy.github.io/2019/04/25/recipe/>

Practical part - RNN

The next kaggle challenge describes measurements of 8 motion sensors (acceleration meters) of a robot moving on campus on several surfaces: <https://www.kaggle.com/c/career-con-2019>

The idea is that the data from sensors can help to understand the nature of the surfaces for the classification mission.

The exercise is interesting because it is a TS problem, and there is a relatively large number of dimensions for the problem.

Of course, you are expected to try rnn, but it is important to try some types, and to understand the meaning of the changes.

It is also necessary to read the description of the problem on the website, and to experience the information carefully, it hides non - trivial things that can improve the results.

As with any challenge, summarize the various stages (Aksploratia, production of features, comparing different models and conclusions)