

Weekly Report: Tasnuba Islam-Alpha AI

Week-03 (May 5 - May 9)

1. Machine Learning specialization:

- a. Course 02: Supervised Machine Learning: Advanced Learning Algorithms
 - i. Completed two weeks of course 2 from the series of machine learning specialization and learned about neural networks and its implementation in python.
 - ii. Built and trained a neural network using TensorFlow.
 - iii. Studied different activation functions and their usage in different cases.
 - iv. Implemented ReLU and Softmax function to understand how they actually work in real life.

2. Tesla Project

- a. Session on ML/DL took place and Tesla S project has been assigned.
- b. Started working on Tesla project and created pipeline for various machine learning models such as Linear Regression, Gradient Boosting, XGBoost, Random Forest, AdaBoost, SVR, KNN etc and evaluated tesla dataset's performance.
- c. Created pipeline for various time series models such as LSTM, GRU, CNN-LSTM, CNN-GRU etc. and evaluated performance.

d. Worked on the documentation of Github.