

Weekly Report: MD. Ariful Islam Alpha AI

Week-01 (march 17 - march 21)

1. Machine Learning specialization:

- a. Course 01: Supervised Machine Learning: Regression and Classification
 - i. Week-1: Learned Linear regression, cost function gradient decent implementation, also implemented these in python
 - ii. Week-2: Learned Cost function and gradient decent for multiple variables, also implemented these.
 - iii. Week-3: Learned Logistic regression for classification, cost function and gradient decent. Also learned about feature scaling, feature engineering for better performance.
- b. Course 02: Advanced Learning Algorithms
 - i. Week-01: Learned basic of neural network, Forward propagation.

2. OOP Concepts

- a. OOP
 - i. Basics of OOP
 - ii. Four main pillars of OOP concepts
 - 1. Inheritance
 - 2. Polymorphism
 - 3. Abstraction
 - 4. Encapsulations

3. Leet code & DeepML

- a. Solved some problems on Leet Code and DeepML

4. Git and Git Hub

- a. Learned some basic functionalities on git

5. Research paper

- a. XGBOOST
 - i. Some you tube videos on Decision tree and XGBOOST for better understanding of research papers.