**Weekly Report: MD. Ariful Islam Alpha AI**

*[Feel free to modify the format as per personal preference for better comprehension]*

# Week-01 (march 17 - march 21)

1. **Machine Learning specialization**:
   1. Course 01: Supervised Machine Learning: Regression and Classification
      1. Week-1: Learned Linear regression, cost function gradiant decent implementation, also implemented these in python
      2. Week-2: Learned Cost function and gradiant decent for multiple variables, also implemented these.
      3. Week-3: Learned Logistic regression for classification, cost function and gradiant decent. Also learned about feature scaling, feature engineering for better performance.
   2. Course 02: Advanced Learning Algorithms
      1. Week-01: Learned basic of neural network, Forward propagation.
2. **OOP Concepts** 
   1. OOP
      1. Basics of OOP
      2. Four main pillers of OOP concepts
         1. Inheritance
         2. Polimorphism
         3. Abstraction
         4. Encapsulations
3. **Leet code & DeepML**
   1. Solved some problems on Leet Code and DeepML
4. **Git and Git Hub**
   1. Learned some basic functionalities on git
5. **Research paper**
   1. XGBOOST
      1. Some you tube videos on Decision tree and XGBOOST for better understanding of research papers.