Weekly Report: Oudarja Barman Tanmoy Alpha AI

Week-03 (April 07 – April 11)

1) Machine Learning Specialization:

   a) Course 02: Advanced Learning Algorithm

      i) Week 1: Neural networks intuition, Neural network model, TensorFlow implementation, Neural network implementation, Speculations on artificial general intelligence (AGI), Vectorization.

      ii) Week 2: Neural Network Training, Activation Function, Multiclass Classification, Backpropagation.

      iii) Week 3: Advice for applying machine learning , Bias and variance, Machine learning development process, Skewed dataset.

      iv) Week 4: Decision Tree, Decision Tree learning, Tree ensembles, Difference between Decision Tree and Neural Network.

2) Mathematics for Machine Learning:

   a) Course 02: Multivariate Calculus

      i) Week 1: Functions, Matching functions visually , Differentiation, Definition of derivative, Product rule, Chain rule.

3) "How to Search & Analyze Relevant Research Papers, Blogs & Online Resources" - task to writing about this topic collaboratively in .md file and later with the use of proper git command to resolve the merging error:

   a) Successfully completed with some point the assigned task with resolving the merge error that has been arisen when tried to merge each other file to a master file.

4) Agile Methodology and Scrum learning task:

   a) Studied about Agile methodology and scrum on the basis of 2nd session taken (no formal deliverables)

5) Summarization of given paper:

   a) Paper "XGBoost: A Scalable Tree Boosting System" was studied completely and writing summarization of that corresponding paper has been completed.