Graphical user interface, text, application, email

Description automatically generated

Project Rubric

1. Project problem and scope is appropriate
   1. **No** old or simple Kaggle competitions or benchmark datasets
   2. **No** TF/Keras tutorials or widely solved problems with available code and notebooks
   3. User generated datasets (crowdsourced, scraped, integrated etc.)
   4. New problem, that is not widely solved
2. Blog post or Medium like article that includes the following. At least (No of Members x 200, minimum 400) words, not counting code or references.
   1. Introduction/Problem Description
   2. Data Description and Data Prep
   3. Model Description and Alternative Model Analysis
   4. Model Optimization
   5. Implementation (Prediction, Operationalization)
   6. Discussion (Business Impact, Potential Improvements, Challenges)
3. Analysis of Alternative Models
   1. Present an analysis of alternative models, where models vary across **as many dimensions as number of members in group** (Minimum 2). Dimensions are
      1. Model Type (DNN, CNN, LSTM, Mixed)
      2. Typical Hyperparameters (Layers, Neurons, Activation Functions, Optimization Algorithm, Batch Size, Epochs)
      3. Problem Type (Regression, Classification, Different formulations of problem with business goals in mind)
      4. Model Structure – Branching and Merging
      5. Advanced Models – GAN, RBM, DRL, Attention Networks etc.
      6. Advanced Implementation – Online learning / Active Learning or other new innovation
4. Includes Python or R Notebook of publishable (on github, linkedin etc.) quality. Well formatted, includes headings and discussion of results, free of errors, and with good results. (20)
5. Presentation
   1. Includes items 2a-2f
   2. Includes working demo
6. Exceed for groups of 2 or lower: Web or Mobile Implementation OR Advanced GAN Model from scratch (No tfhub)
7. Exceed for groups with more than 2 members: Web or Mobile Implementation AND Advanced GAN Model from scratch (No tfhub)