

Deep Learning Challenge

Purpose:

The purpose of the analysis is to assist the nonprofit foundation Alphabet Soup with creating a tool that can help it select the applicants for funding with the best chance of success in their ventures.

Questions:

- Data Preprocessing
 - What variable(s) are the target(s) for your model? “Is Successful”
 - What variable(s) are the features for your model? “Application type”
 - What variable(s) should be removed from the input data because they are neither targets nor features? Use Case, Organization and Special Consideration.
- Compiling, Training, and Evaluating the Model
 - How many neurons, layers, and activation functions did you select for your neural network model, and why? The numbers were selected based on the starter code that was provided.
 - Were you able to achieve the target model performance?

Overall Results:

The final accuracy on the training dataset is 72.89%. In this case, the model correctly predicted the target variable about 72.89% of the time. On average, each epoch took 1 second, and each training step took 4 milliseconds. This gives an indication of the computational efficiency of the training process. Overall, these results suggest that the model achieved a decent level of accuracy on the training data, but it's essential to assess its performance on a separate validation set to ensure that it generalizes well to unseen data. Additionally, information about the validation set's performance, along with any potential overfitting considerations, would provide a more comprehensive evaluation of the model.