

Data Processing

- What variable(s) are the target(s) for your model?
 - Target variable is the “IS_SUCCESSFUL” column from the application_df
- What variable(s) are the features for your model?
 - The feature variables are the other columns included in the application_df, this was defined when we dropped the “IS_SUCCESSFUL” column from the dataframe.
- What variable(s) should be removed from the input data because they are neither targets nor features?
 - Both “EIN” and “NAME” columns were dropped and removed because they were neither target nor features for the dataset

Compiling, Training, and Evaluating the Model

- How many neurons, layers, and activation functions did you select for your neural network model, and why?
 - I used 8 hidden_nodes_layer_1 and 5 hidden_nodes_layer_2
- Were you able to achieve the target model performance?
 - No I was not able to achieve the 75 percent model accuracy target
- Steps to increase model performance
 - I could have added more layers, removed more columns, add more hidden nodes or switched up the activation functions to achieve higher model accuracy.

Summary:

The deep learning model was around 73% accurate in predicting the classification problem. Higher accuracy could be achieved by doing the steps stated above.