

Deep Learning Challenge Report

Data Preprocessing

- What variable(s) are the target(s) for your model?
 - The variables that were the targets for the model are 'IS_SUCCESSFUL'.
- What variable(s) are the features for your model?
 - The variables that were featured for the model were the remaining data points.
- What variable(s) should be removed from the input data because they are neither targets nor features?
 - The variables that were removed for EIN and NAME.

Compiling, Training, and Evaluating the Model

- How many neurons, layers, and activation functions did you select for your neural network model, and why?
 - I selected three layers after trying multiple different amounts to try and get as close to a 75% accuracy score as I could. Although I was unsuccessful.
- Were you able to achieve the target model performance?
 - As mentioned before I was unsuccessful in meeting the target performance amount.
- What steps did you take in your attempts to increase model performance?
 - I originally started with one hidden layer with a node amount of 8. This resulted in an accuracy score of around 72%.
 - Second I tried adding a second hidden layer with a node amount of 5. This resulted in basically the same score.
 - I then tried adding a third layer with a node amount of 10, and also 30. Both resulting in the same numbers.
 - Unfortunately I was unable to get an accuracy score of 75%.

Summary: Summarize the overall results of the deep learning model. Include a recommendation for how a different model could solve this classification problem, and then explain your recommendation.

The overall results of my deep learning model was that I had a 72% accuracy score, even after trying many variations. I would consider using a different classification model to see if it would provide a better accuracy score.