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Data Science

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Neural Network Model Report

**Overview:**

The purpose of this analysis was to see the best chance of success within the applicant's ventures. Using machine learning and neural networks, we can see the success rate of applicant’s using the Alphabet Soup Charity.

**Data Processing**:

* The Target Variable is **‘IS\_SUCCESSFUL’**, representing whether the funding was used effectively.
* Feature Variables include columns such as **APPLICATION\_TYPE, AFFILIATION, CLASSIFICATION, USE\_CASE, ORGANIZATION, STATUS, INCOME\_AMT, SPECIAL\_CONSIDERATIONS**, and **ASK\_AMT**.
* The variables that were removed were **‘EIN’** and ‘**NAME’.** These two variables do not contribute to the prediction.

**Evaluation:**

I was able to achieve the target model by choosing 10+ columns for each. This allowed me to get more accurate results using more data to accurately analyze the data. I was able to achieve the target model performance. I made sure to use enough columns of data so it can be as accurate as possible.

**Summary:**

The deep learning model shows promising results in predicting the success of organizations that were funded using Alphabet Soup Charity. The overall accuracy met the expectations and predictions that were made in assumption of the success of Alphabet Soup.