**SVHN Digit Recognition**

Deep Learning

**Contents / Agenda**

* Business Problem Overview and Solution Approach
* Data Preprocessing for ANNs
* Model Performance Summary for ANNs
* Data Preprocessing for CNNs
* Model Performance Summary for CNNs
* Conclusion

**Business Problem Overview**

* Description of the business problem that the analysis aims to solve
* Explanation of how the analysis can help achieve the business objective
* Mention the solution approach/methodology

**Data Overview**

* Give an Overview of the Dataset

**Data Pre-Processing for ANNs**

* Mention the data preprocessing steps required for making the training data usable for ANNs.
* Mention data preprocessing steps required for the labels

**Model Performance Summary**

**Artificial Neural Networks:**

* Mention the main point of differences between the two models built.
* Show the training versus validation accuracy plot for the model that you choose.
* Show precision and F1 score for each digit and also plot the Confusion matrix and explain a few findings.
* Write overall Observations

**Data Pre-Processing for ANNs**

* Mention the data preprocessing steps required for making the training data usable for ANNs.
* Mention data preprocessing steps required for the labels

**Model Performance Summary**

**Convolutional Neural Networks:**

* Mention the main point of differences between the two models built.
* Show the training versus validation accuracy plot for the model that you choose.
* Show precision and F1 score for each digit and also plot the Confusion matrix and explain a few findings.
* Write overall Observations

**Choosing the Final Model:**

* Write about which approach you are choosing as the final solution and why.

**Appendix:**

* Additional details on the analysis, such as code snippets or technical diagrams
* Any supplementary information or supporting materials that were used in the analysis