CS640 Project Report

Team Members

# Data Analysis

All research experiments start from the basic level of data analysis. In this section, describe what you learn from the training data. Your answer should include but is not limited to an overview of the dataset, a description of some interesting observations, and an interpretation of some statistical analysis. Creating figures to help illustration is strongly recommended.

# Methods

You are asked to explore multimodal learning in this project. The methodology section is divided into subsections by modalities. You can further split the modality subsections into smaller ones if you want to show more than one approach. However, there is no need to include every single method you have tried. Rather, focus on the most meaningful one(s), and briefly talk about some less interesting ones if there is any.

Lastly, when describing your methods, please keep the following in mind:

* If you are borrowing some existing approaches (for example, from someone’s solution on Kaggle), you must cite the source. A one-sentence description and a link is sufficient.
* Illustrate your approaches in your own words. Your illustration should be detailed enough for the reader to understand without being confused by long paragraphs. Using figures and/or diagrams can help.

## Method(s) for Tabular Data

## Method(s) for Image Data

## Method(s) for Fusion

# Experiments and Results

Describe the cross validation experiments you have conducted and the corresponding performance results. Your description of the CV may include but is not limited to: the training or fine-tuning procedure (for example, are the fusion models trained part by part, or as a whole), the choice of hyperparameter values, and the selection of tabular features.

In addition, if you have explored some image processing experiments and would like to share some interesting results, you can divide this section into subsections to separate the contents.

# Discussions

Discuss the experimental results in words. For example, you can compare the results, show some interesting discoveries, propose insights, etc.. Using a combination of figures and words is recommended.

# Conclusion and Future Work

Point out your chosen approach for test data (including the hyper-parameter values). Discuss some issues if there is any and share your thoughts of future work if more time is allowed.

## Code Availability

You need to put all of your code in one place and specify the location here. The code can be under some member’s SCC directory, or on Github.