Data-Collection

- We found two datasets for this project that contained sets of images. Each image in the set is the same, but in a rotated form. This was, we are able to train our model to understand rotated images. For our third dataset, we created objects in Blender. We then created sets of various rotations of each object. We then created a json file that held various information about each of these images. Finally, we created a python script that correlated each image to its rotation, so that we can easily train our dataset.

Modelling

- We created our baseline model in order to determine how a regular ResNet model works given this dataset. We also created a second model (relational model as we call it), which attaches onto the final layer of the ResNet. We also have a file that contains various functions to visualize the embeddings, and evaluate the models.

Preliminary Results/What we are working on

- We are currently working on training the models, creating more visualizations/evaluation functions, and writing our final report. We also need to test our models (after training), in order to see if the relational model out performs the baseline model.