

# CS498 AML,AMO HW4 Report

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TOTAL POINTS

**75 / 75**

QUESTION 1

1 Plot of Mean Images **10 / 10**

- ✓ - **0 pts** Correct
- **10 pts** Incorrect
- **5 pts** Partially incorrect

- **10 pts** 2 days late
- **15 pts** 3 days late
- **20 pts** 4 days late
- **25 pts** 5 days late
- **20 pts** 6+ days late

QUESTION 2

2 Plot Error vs. Class after 20-PCA **15 / 15**

- ✓ - **0 pts** Correct
- **15 pts** Incorrect

QUESTION 3

3 2-D Scatter Plot for Part B **25 / 25**

- ✓ - **0 pts** Correct
- **0 pts** Points are unlabelled
- **0 pts** Points are labelled with class indices instead of names
- **5 pts** Scales are wrong indicating improper MDS
- **1 pts** Labels are incorrect
- **5 pts** Points are improperly separated
- **0 pts** Click here to replace this description.
- **25 pts** No submission

QUESTION 4

4 2-D scatter plot for Part C **25 / 25**

- ✓ - **0 pts** Correct
- **0 pts** Labels missing
- **0 pts** Labels incorrect or labelled with class indices
- **5 pts** Scale is wrong because MDS procedure was incorrect or points are improperly separated
- **25 pts** No Submission

QUESTION 5

5 Late Submission **0 / 0**

- ✓ - **0 pts** Correct
- **5 pts** 1 day late

A plot of the mean image for each class

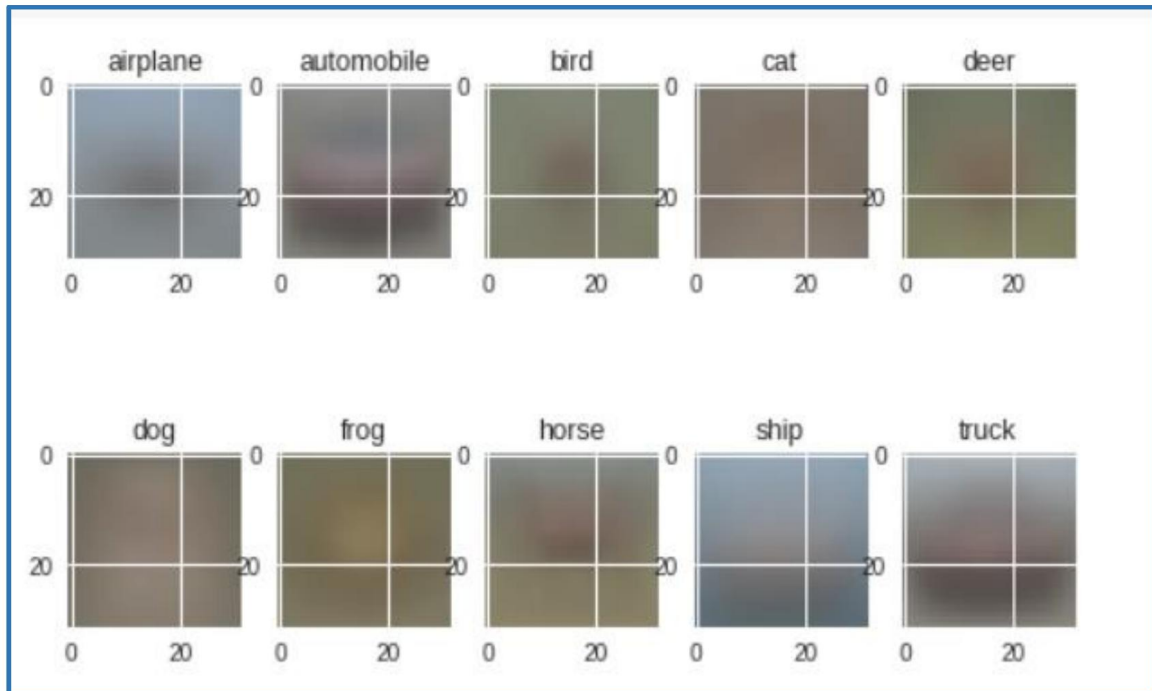


Image With Axis

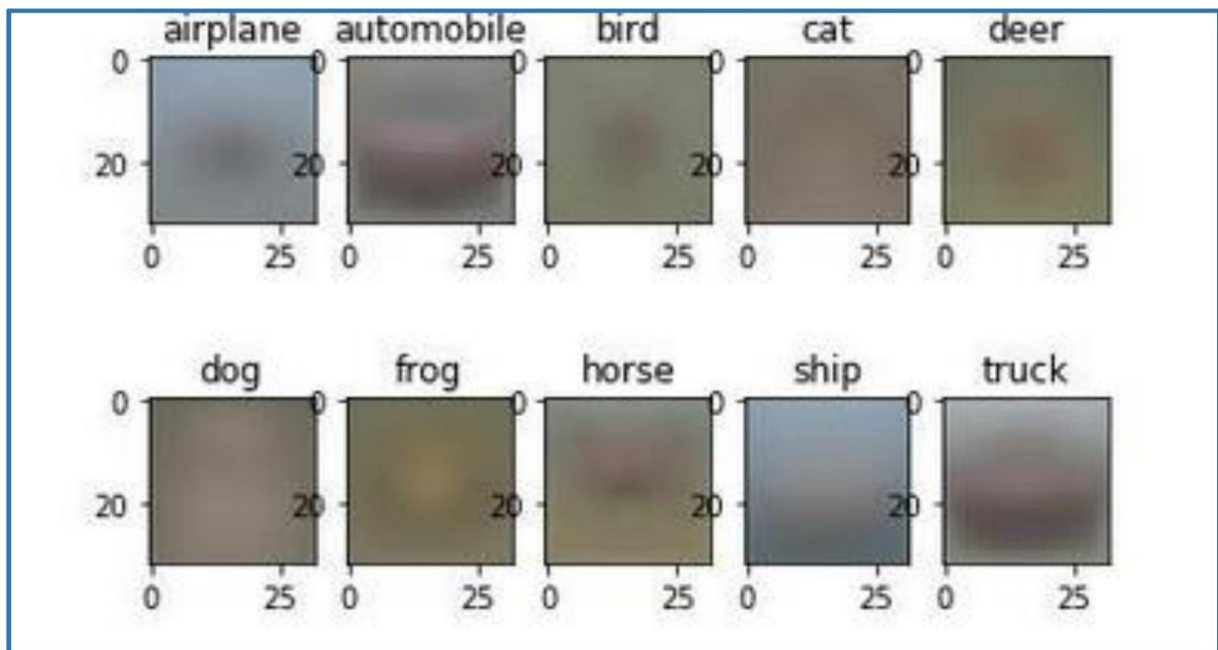
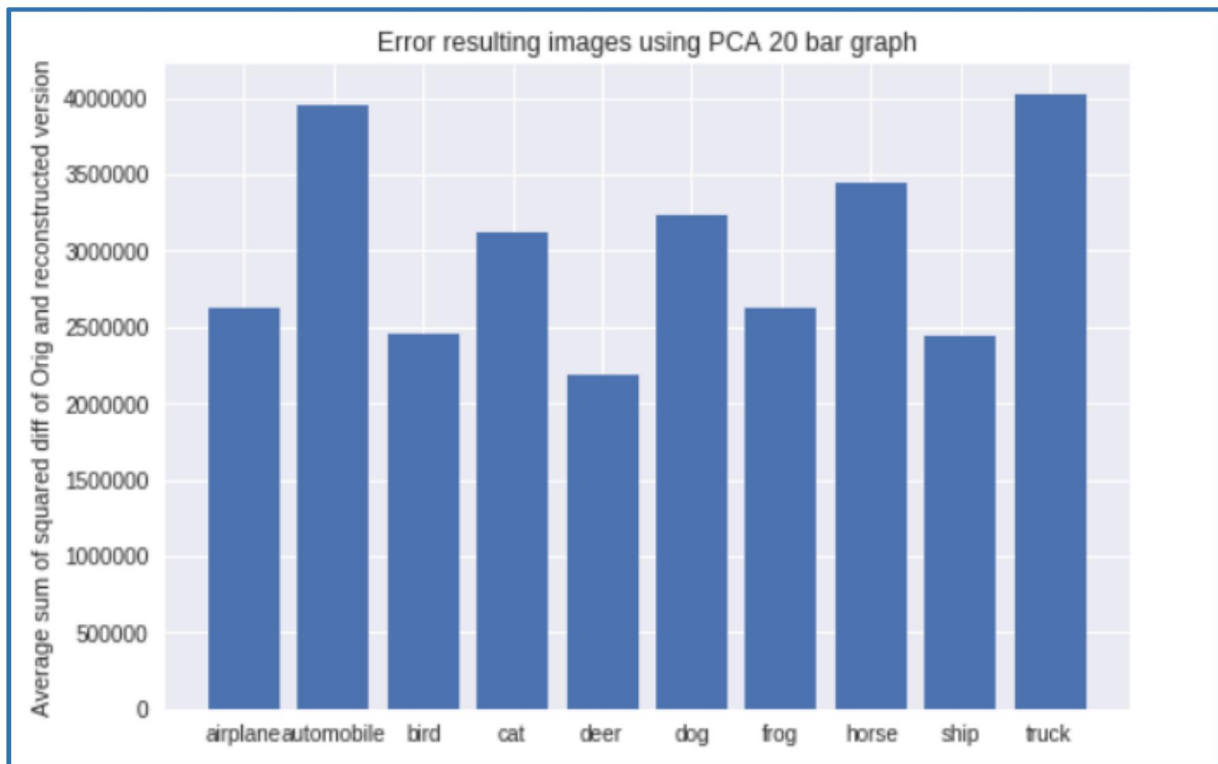
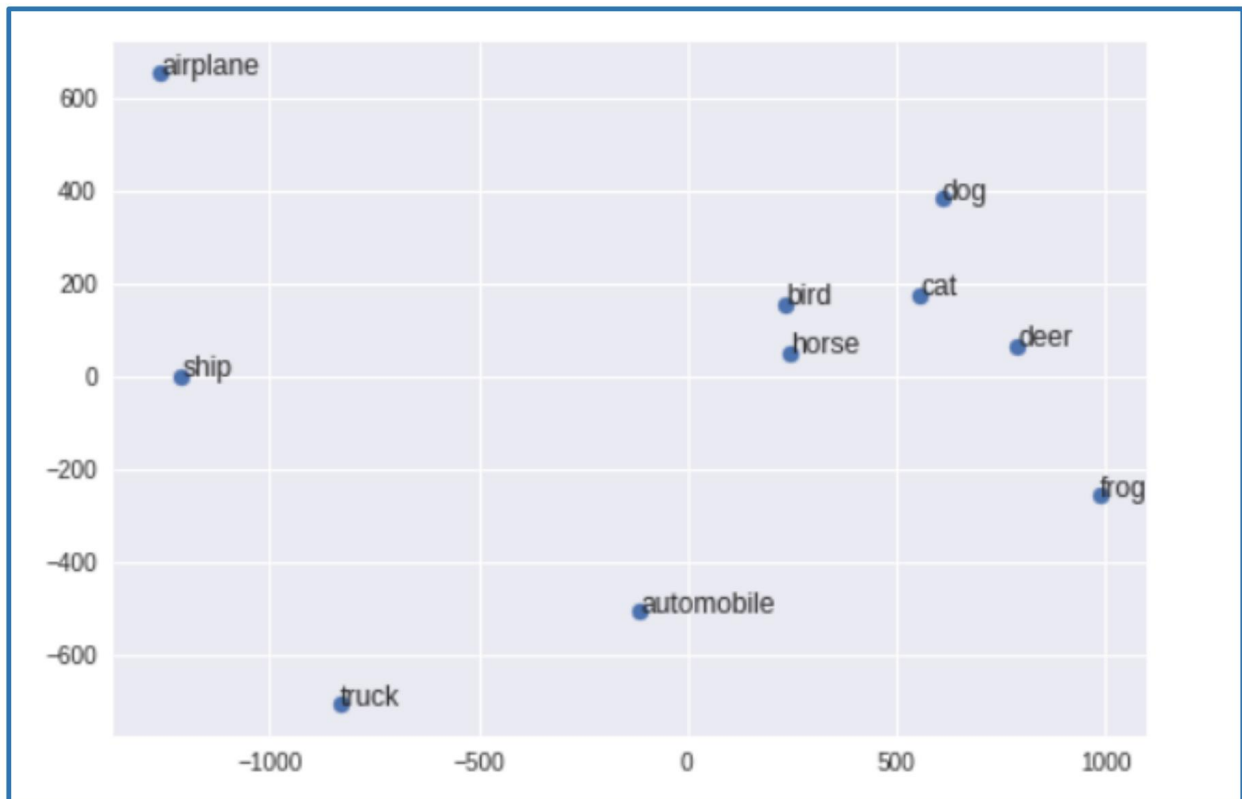


Image Without Axis

**A plot of the average sum of squared pixel-wise difference between the reconstructed and original images of each class as a bar graph vs. the class label**



The 2D scatter plot obtained after performing principal coordinate analysis using euclidean distance.



The 2D scatter plot obtained after performing principal coordinate analysis using the similarity metric in part C.

