

# CS 4476 PS5

Name

GT Email

GT ID

**Part 1: Standard Scaler: Why did we use StandardScaler instead of looping over all the dataset twice for mean and standard deviation? Why a simple loop will not be a good choice in a deployed production grade ML system?**

<text answer here>

**Part 1: Why do we normalize our data (0 mean, unit standard deviation)?**

<text answer here>

**Part 3: Loss function. Why did we need a loss function?**

<text answer here>

**Part 3: Explain the reasoning behind the loss function used**

<text answer here>

## Part 5: Training SimpleNet

<Loss plot here>

<Accuracy plot here>

Final training accuracy value:

Final validation accuracy value:

**Conclusion: briefly discuss what you have learned from this project.**

<Text solution here>

## **EC1.1: Screenshot of your `get_data_augmentation_transforms()`**

<Screenshot here if attempted; do not delete the slide if not attempted>

## EC1: Training to solve overfitting

<Loss plot here>

<Accuracy plot here>

Final training accuracy value:

Final validation accuracy value:

## EC2 AlexNet: Training Alexnet

<Loss plot here>

<Accuracy plot here>

Final training accuracy value:

Final validation accuracy value: