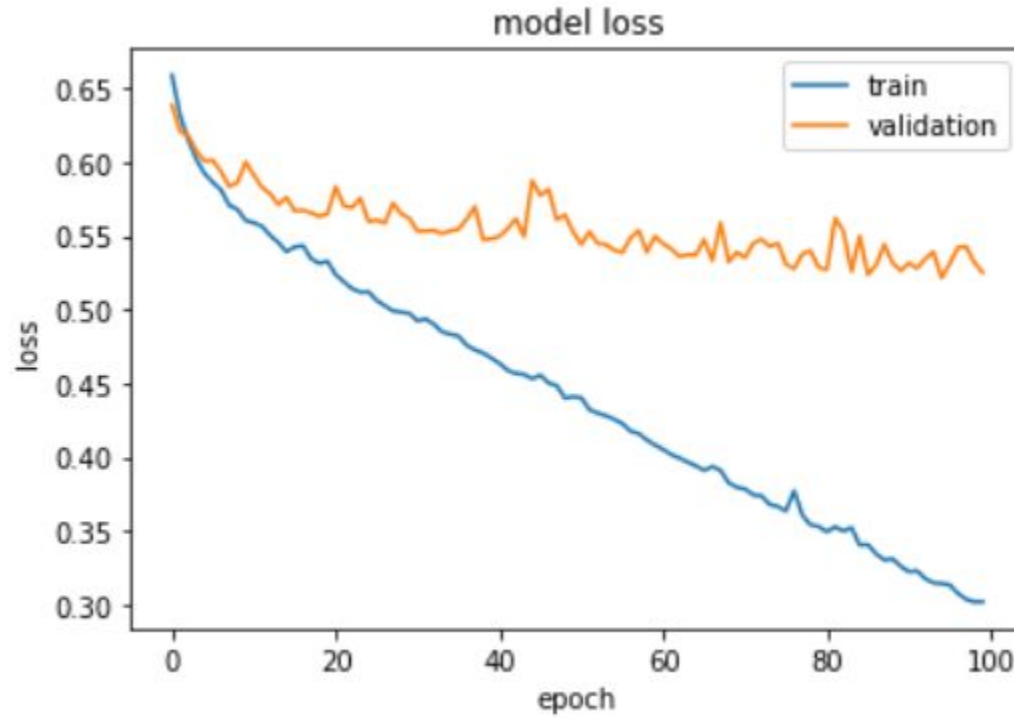
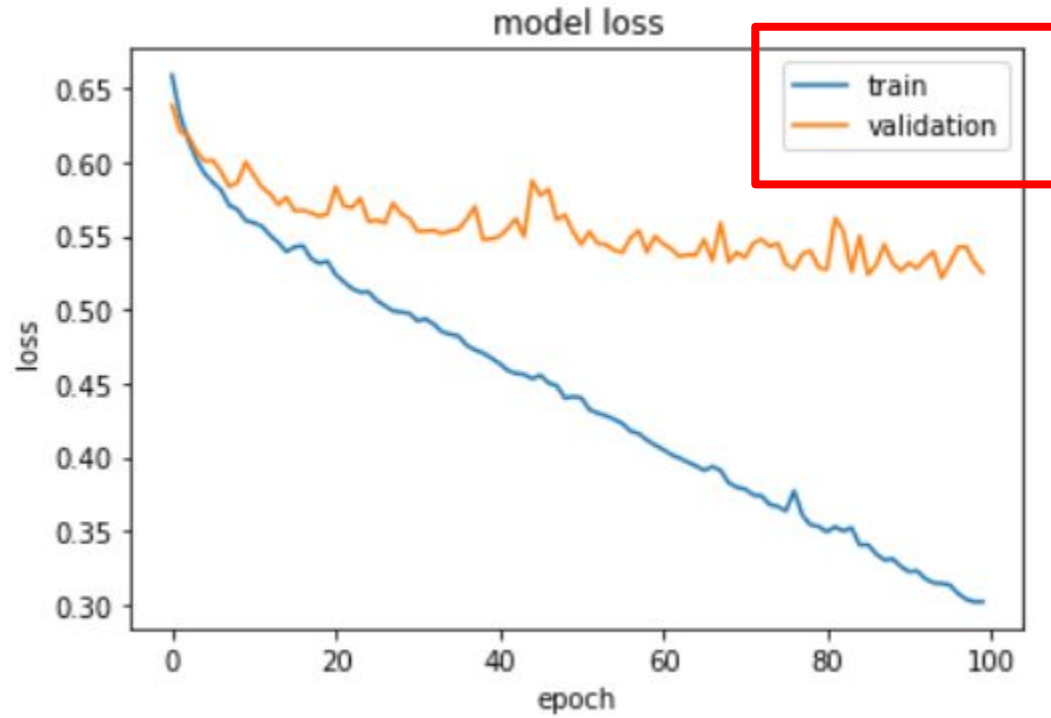


Improving your Neural Network

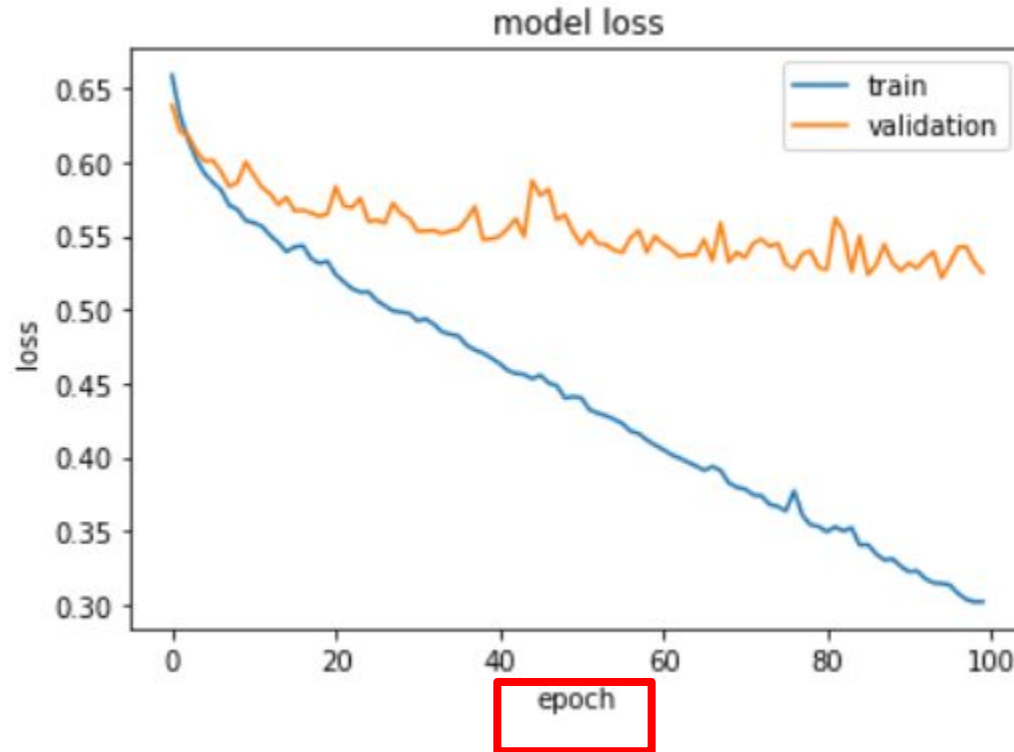
Visualizing training and validation loss



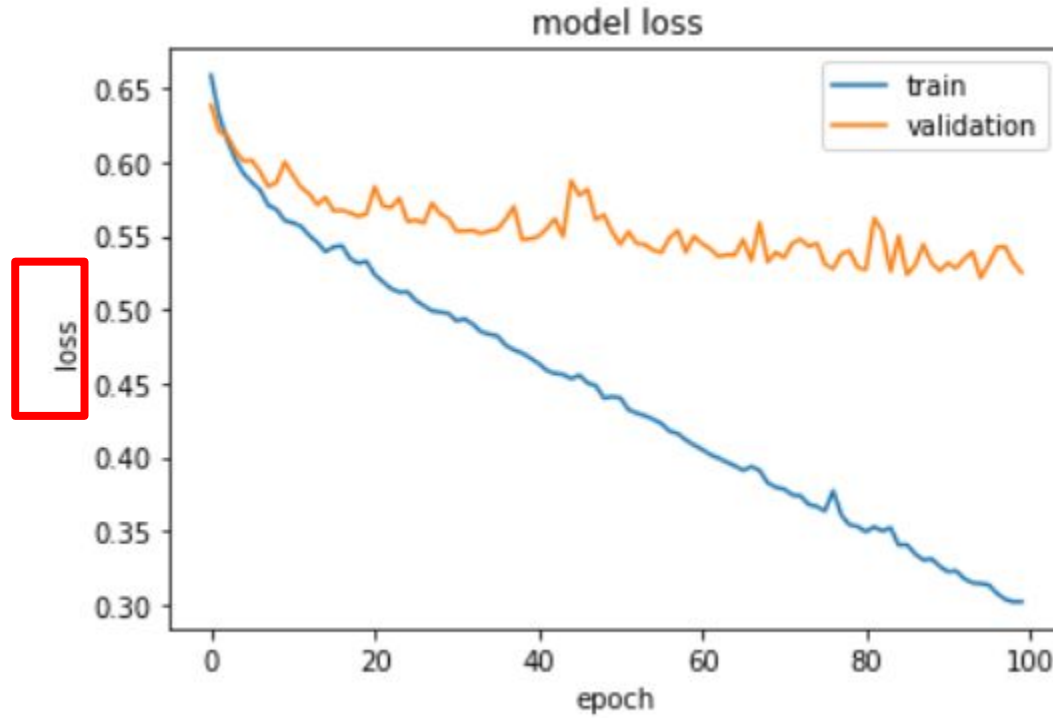
Visualizing training and validation loss



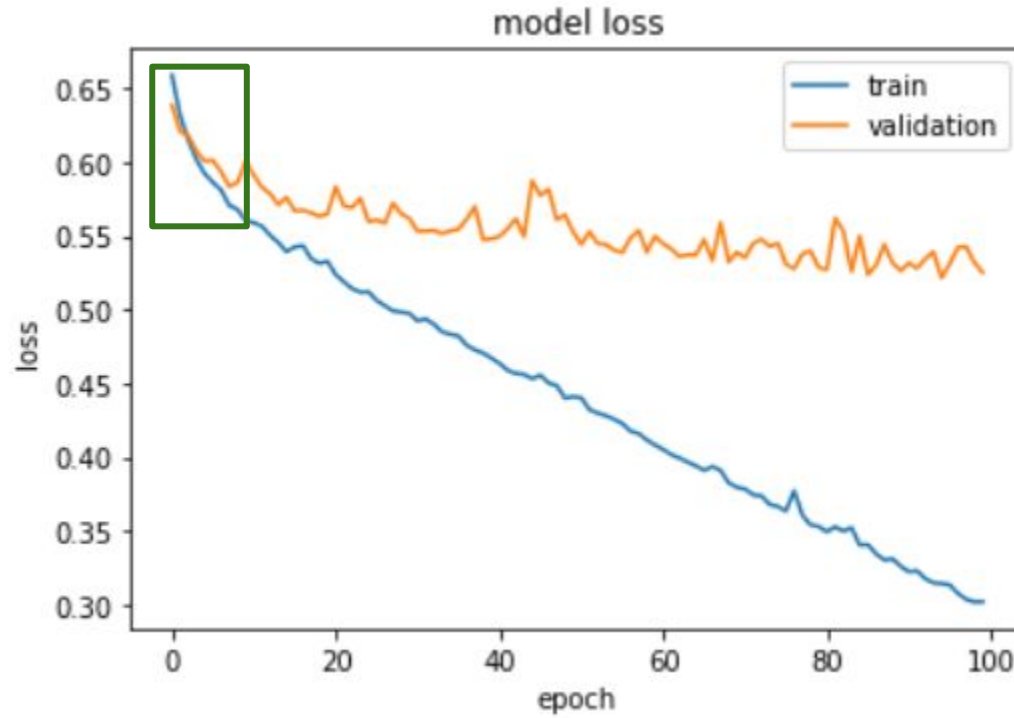
Visualizing training and validation loss



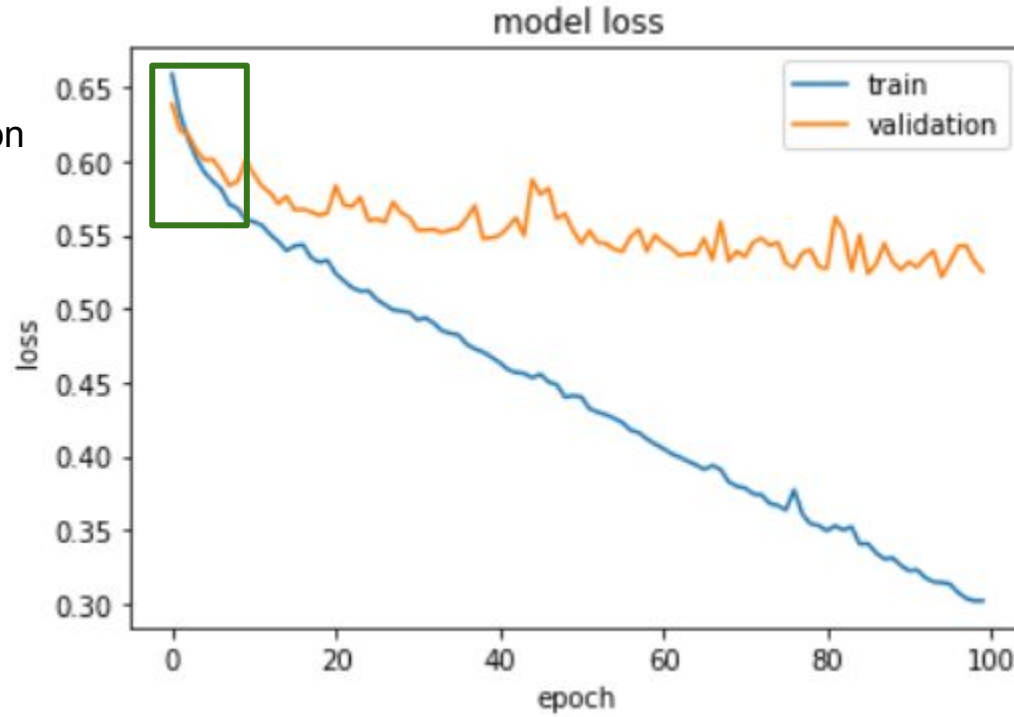
Visualizing training and validation loss



Visualizing training and validation loss

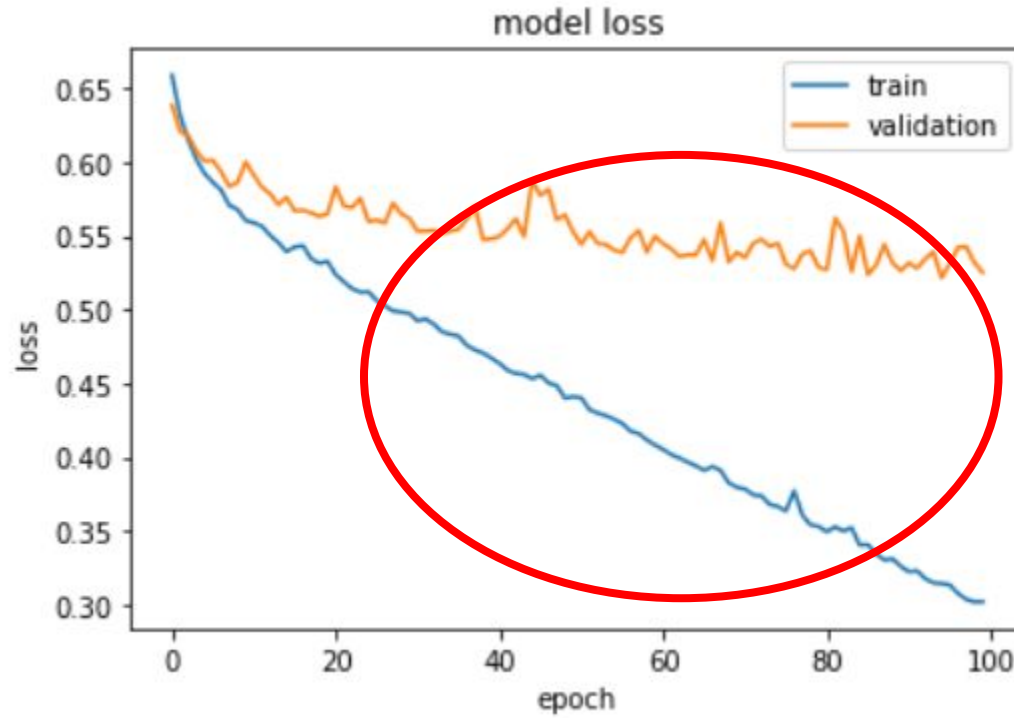


Visualizing training and validation loss

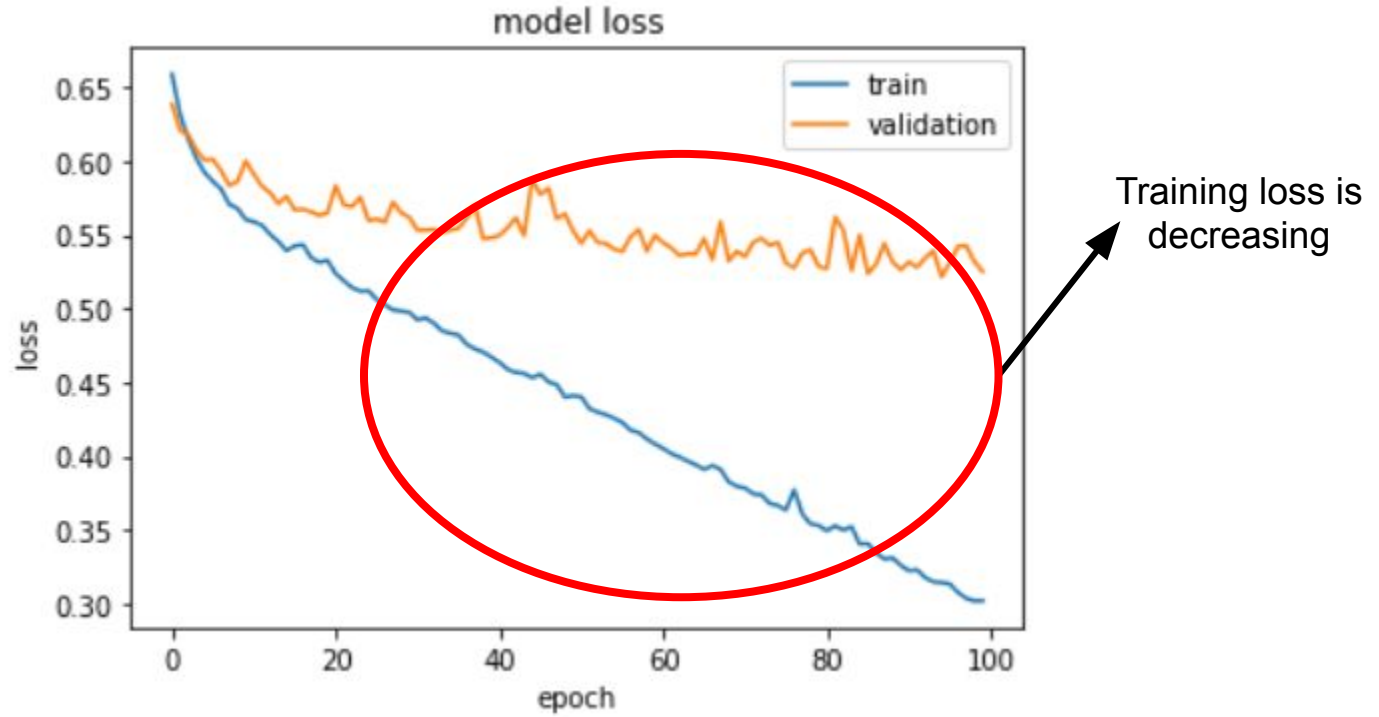


Both training and validation loss is decreasing

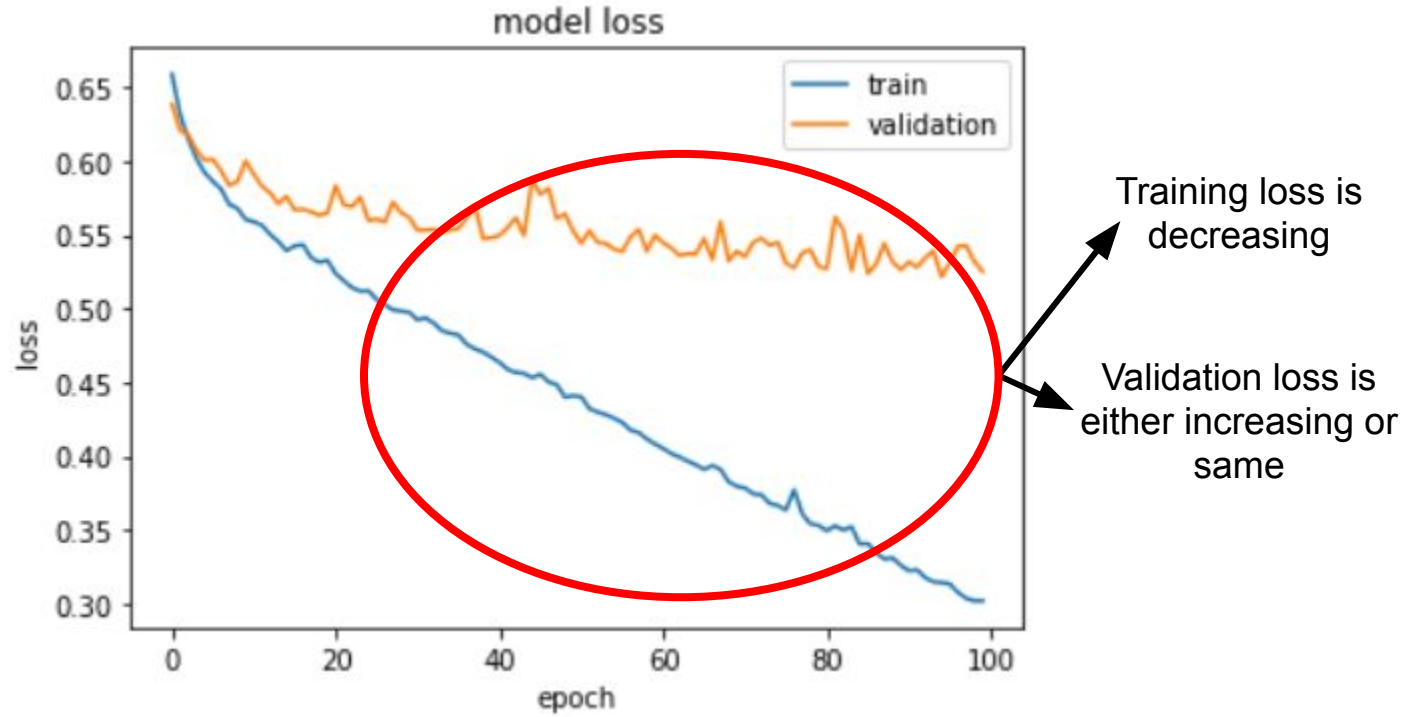
Visualizing training and validation loss



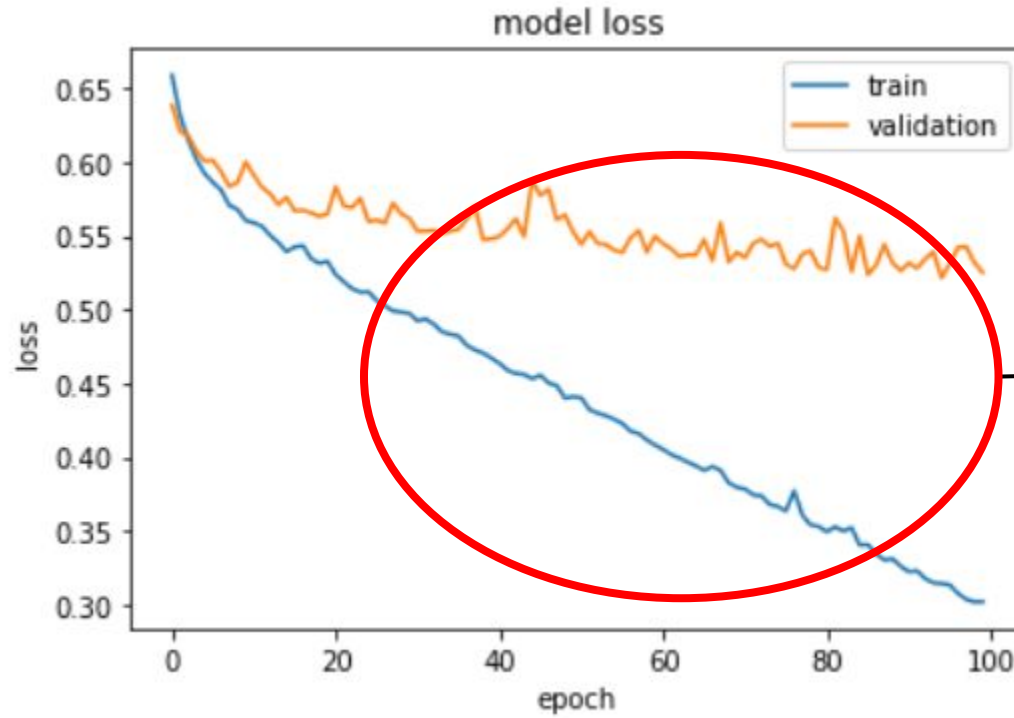
Visualizing training and validation loss



Visualizing training and validation loss

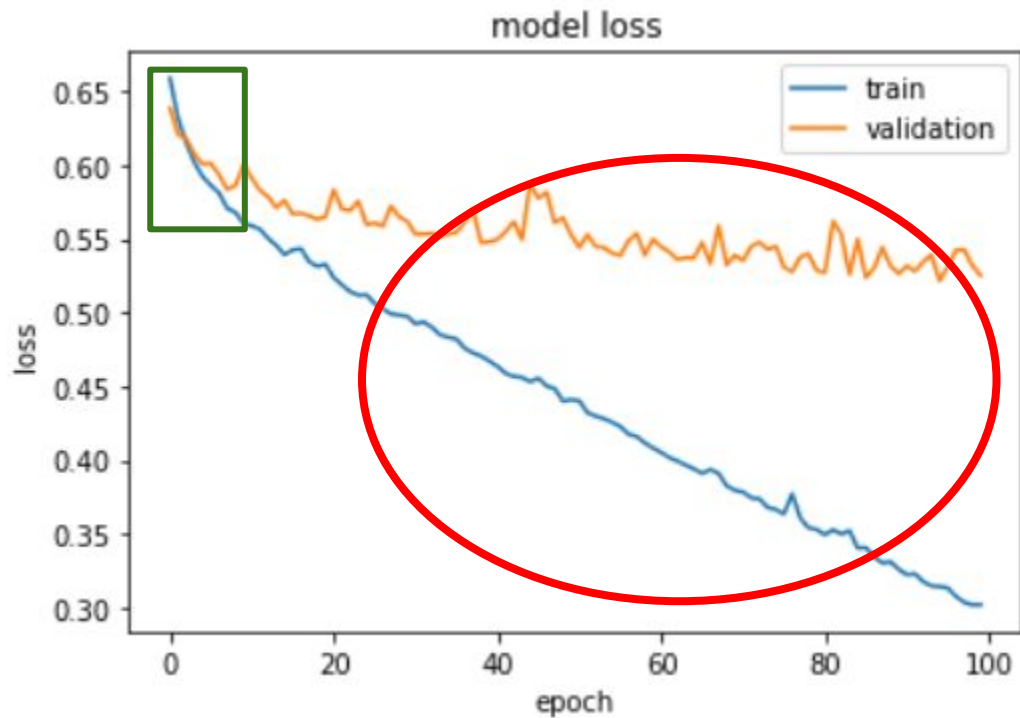


Overfitting

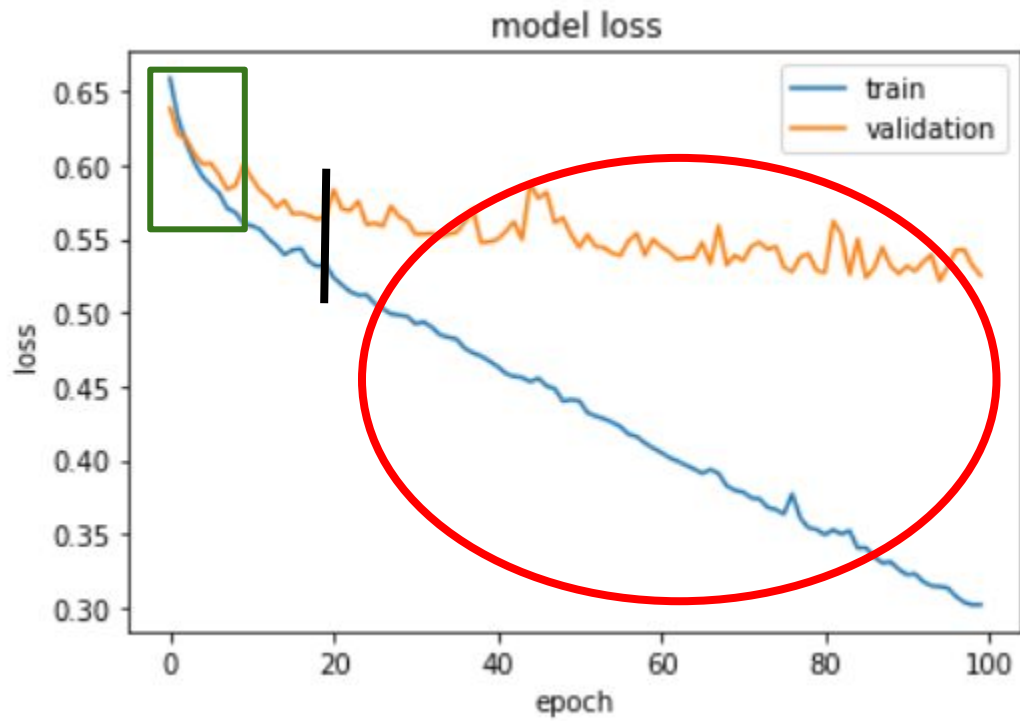


Model is overfitting

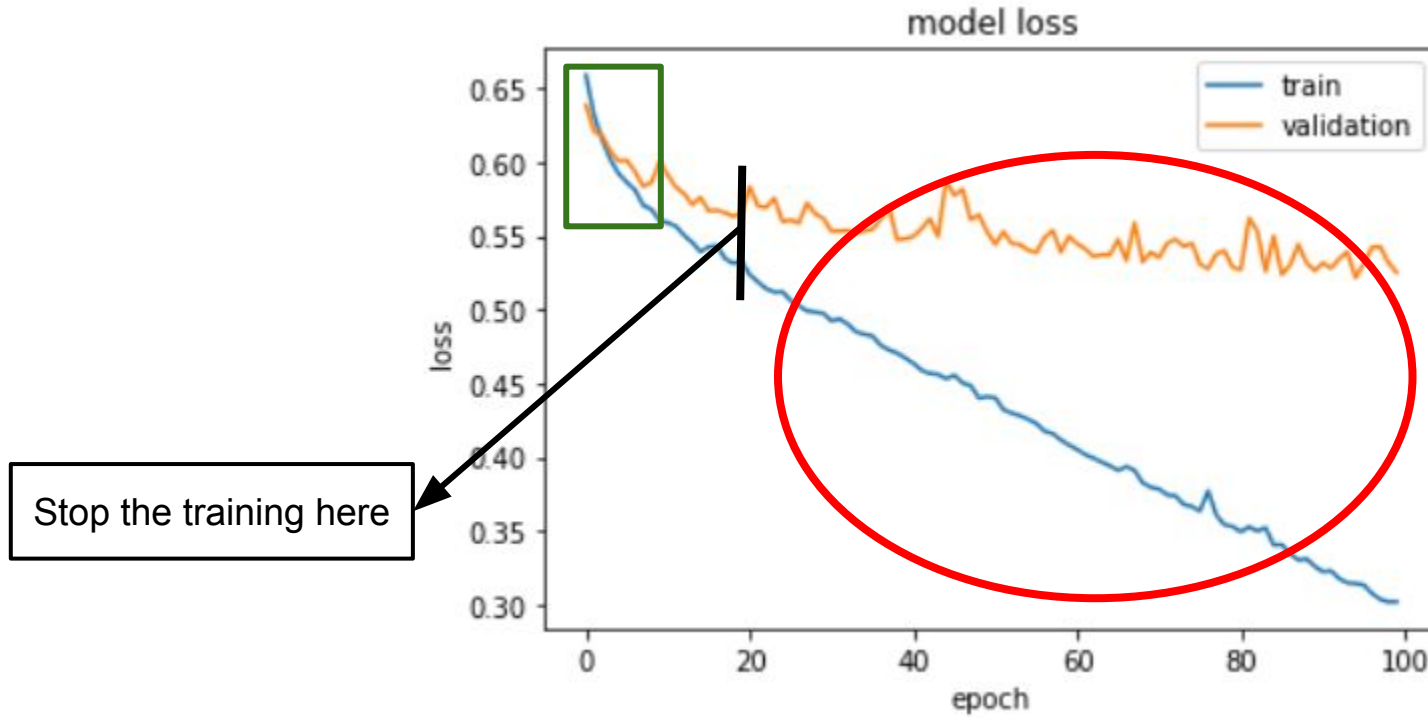
Overfitting



Overfitting



Early Stopping

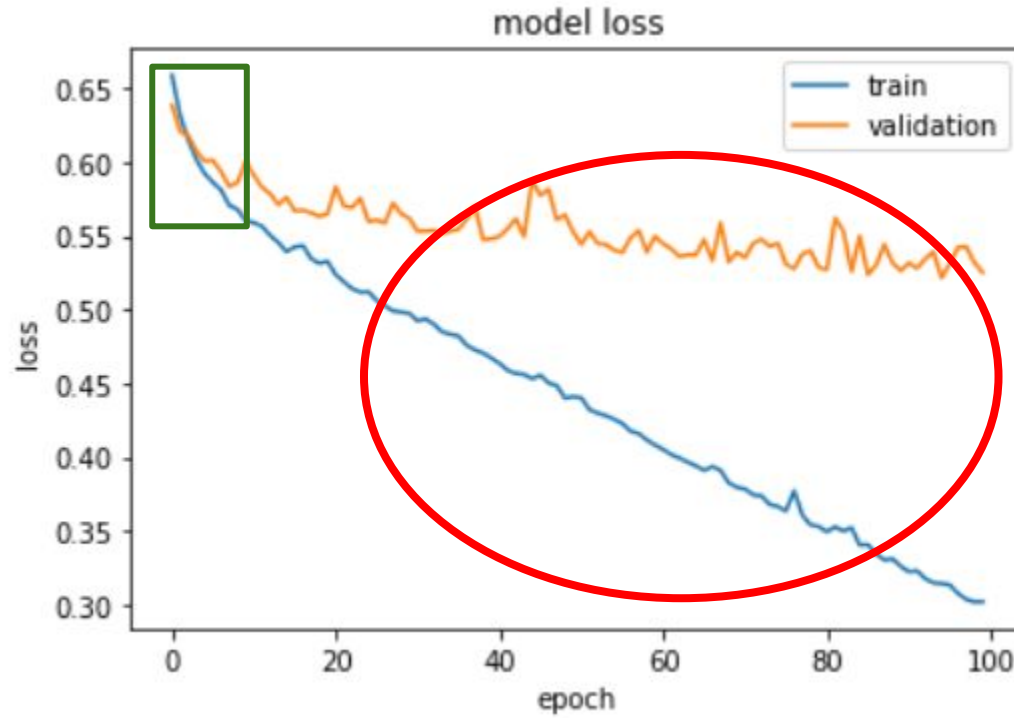




Thank You!

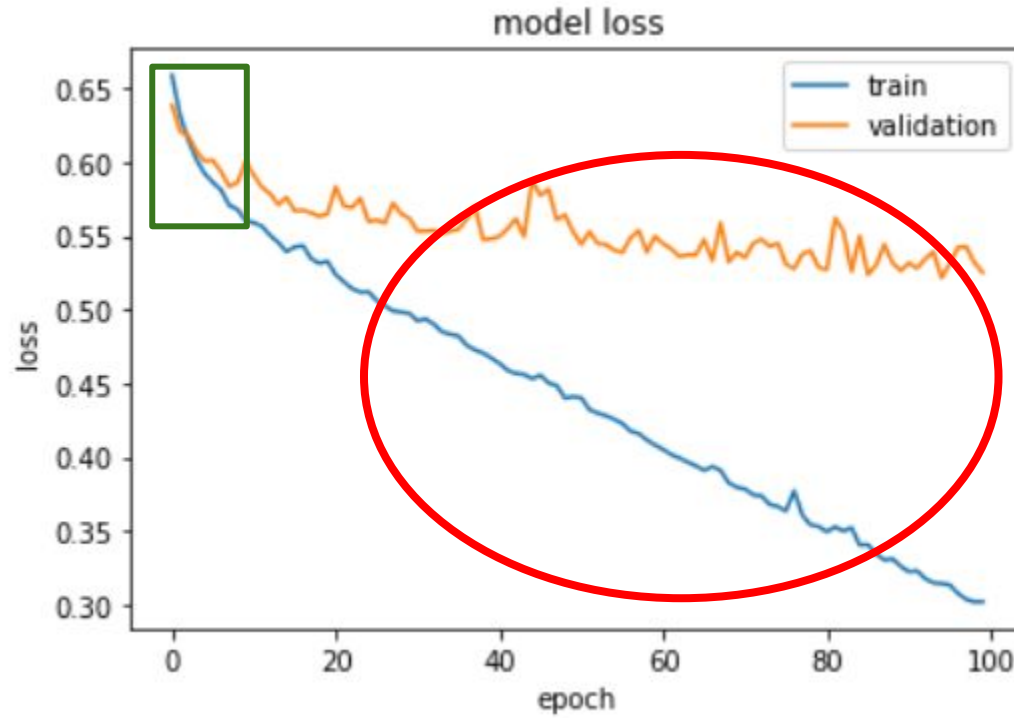
Early Stopping

- Keep track of a metric:



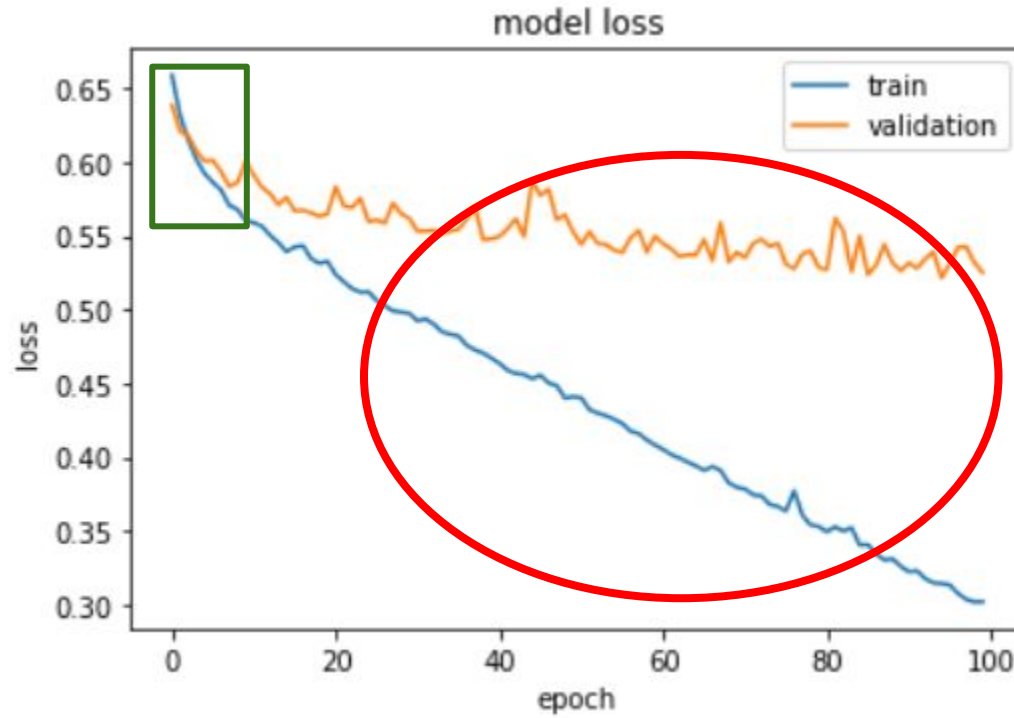
Early Stopping

- Keep track of a metric:
 - validation loss



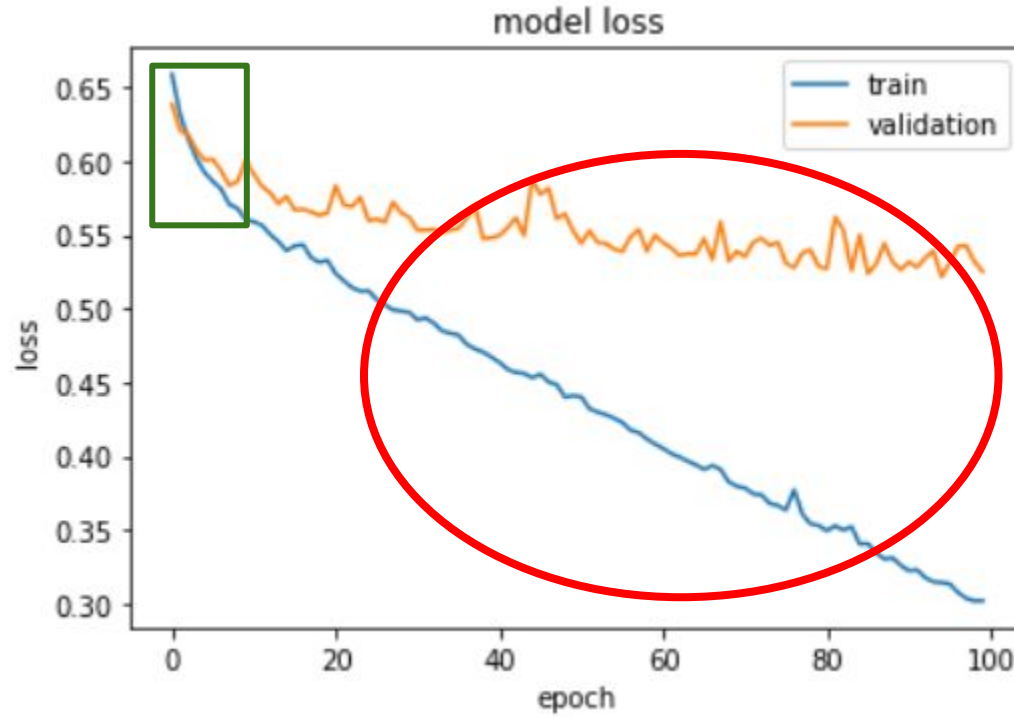
Early Stopping

- Keep track of a metric:
 - validation loss or
 - validation accuracy



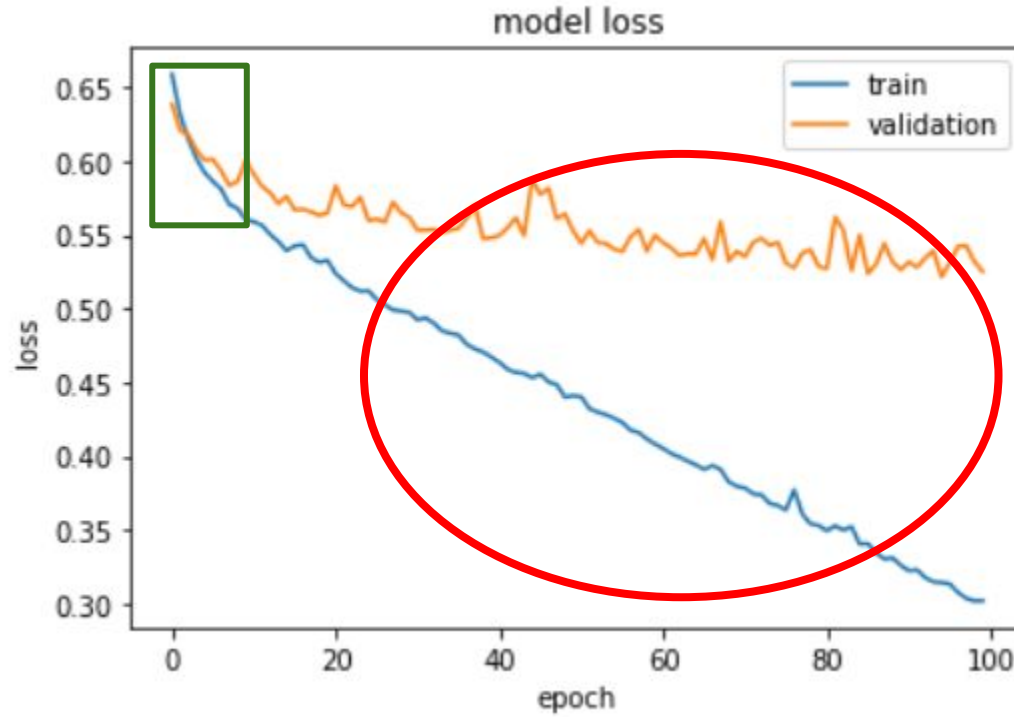
Early Stopping

- Keep track of a metric:
 - validation loss or
 - validation accuracy
- Threshold



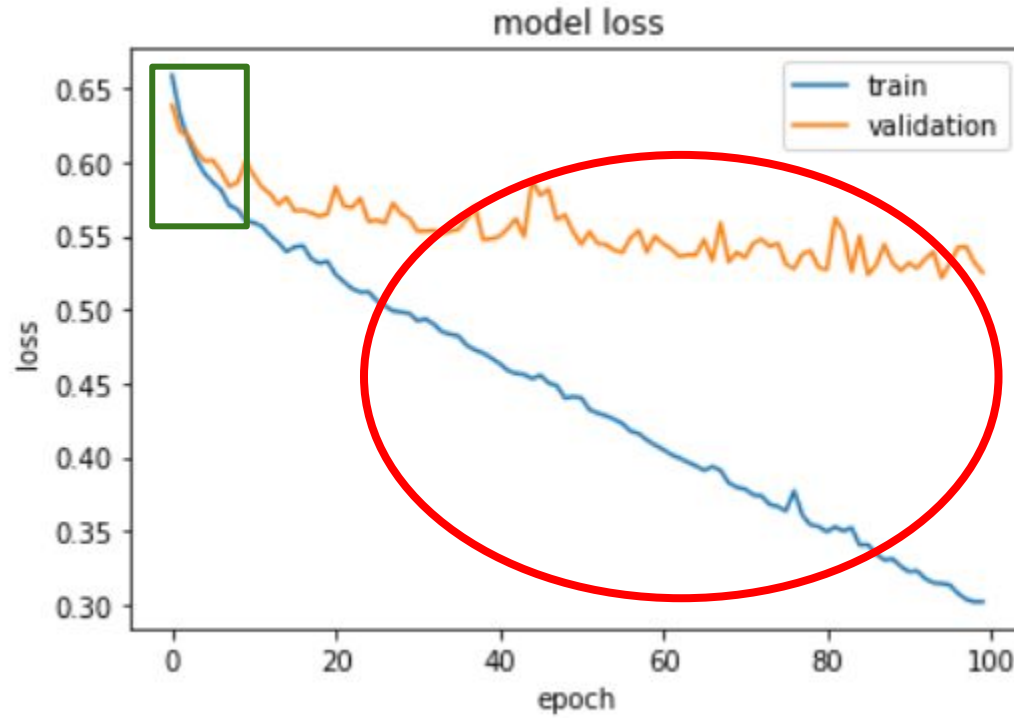
Early Stopping

- Keep track of a metric:
 - validation loss or
 - validation accuracy
- Threshold
- Number of epochs



Early Stopping

- Metric: validation loss
- Threshold: 0.01
- Number of epochs: 5



Steps to solve emergency vs non-emergency vehicle classification problem

1. Loading the dataset
2. Pre-processing the data
3. Creating training and validation set
4. Defining the model architecture
5. Compiling the model
6. Training the model
7. Evaluating model performance

Steps to solve emergency vs non-emergency vehicle classification problem using Early Stopping

1. Loading the dataset
2. Pre-processing the data
3. Creating training and validation set
4. Defining the model architecture
5. Compiling the model
6. Setting up Early Stopping
7. Training the model using Early Stopping
8. Evaluating model performance