

## Project - Perceiver

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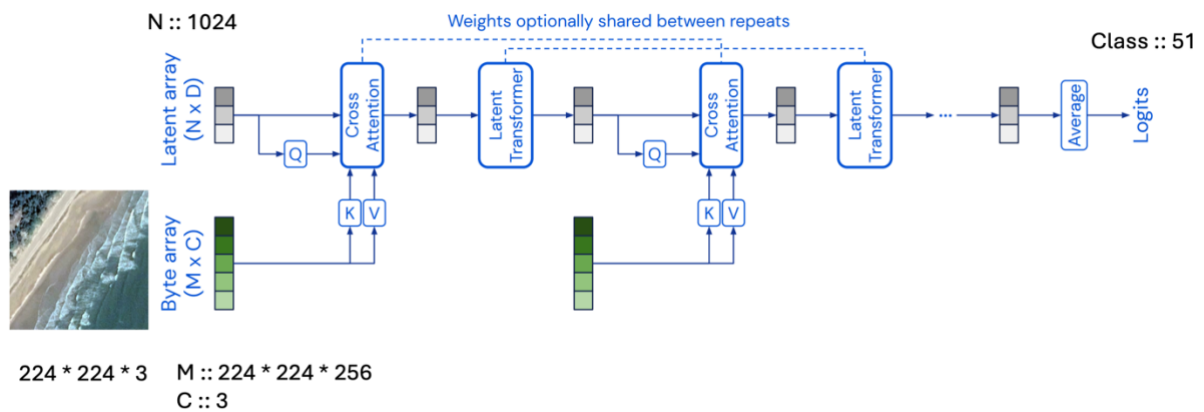
## Model Details

Architecture

1. **Perceiver Architecture : Pre-trained model**
2. **For out features, the model's classification head is replaced for classification of 51 classes.**

Device details:

- **The model is trained using CUDA-enabled GPUs for faster computation.**



## Training Details

Table 1- Data Set Count Details

Data Set	Split	Remarks
Training	80%	Random split
Test	20%	

Transformations:

**Training Images:** Resize to 224x224, normalization and Shuffle as True

**Test Images:** Resize to 224x224, normalization and Shuffle as False

Hyperparameters:

**Learning Rate:** 5e-5

**Epochs:** 10

**Batch Size:** 2

**Optimizer :** AdamW

## Output

Accuracy on Test set : **89.45%**

Epoch: 0

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C:\Users\Prof.RaajRamsankaran\AppData\Local\Programs\Python\Python310\lib\site-packages\PIL\Image.py:3167: DecompressionBombWarning: Image size (110124036 pixels) exceeds limit of 89478485 pixels, could be decompression bomb DOS attack.

warnings.warn(

Model saved after epoch 1

Epoch: 1

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C:\Users\Prof.RaajRamsankaran\AppData\Local\Programs\Python\Python310\lib\site-packages\PIL\Image.py:3167: DecompressionBombWarning: Image size (110124036 pixels) exceeds limit of 89478485 pixels, could be decompression bomb DOS attack.

warnings.warn(

Model saved after epoch 2

Epoch: 2

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warnings.warn(

Model saved after epoch 3

Epoch: 3

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warnings.warn(

Model saved after epoch 4

Epoch: 4

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warnings.warn(

Model saved after epoch 5

Epoch: 5

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warnings.warn(

Model saved after epoch 6

Epoch: 6

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warnings.warn(

Model saved after epoch 7

Epoch: 7

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warnings.warn(

Model saved after epoch 8

Epoch: 8

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warnings.warn(

Model saved after epoch 9  
Epoch: 9

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C:\Users\Prof.RaajRamsankaran\AppData\Local\Programs\Python\Python310\lib\site-packages\PIL\Image.py:3167: DecompressionBombWarning: Image size (110124036 pixels) exceeds limit of 89478485 pixels, could be decompression bomb DOS attack.
  warnings.warn(
```

Model saved after epoch 10

0%| | 0/1000 [00:00<?, ?it/s]

```
C:\Users\Prof.RaajRamsankaran\AppData\Local\Programs\Python\Python310\lib\site-packages\PIL\Image.py:3167: DecompressionBombWarning: Image size (93508900 pixels) exceeds limit of 89478485 pixels, could be decompression bomb DOS attack.
  warnings.warn(
```

Accuracy on test set: {'accuracy': 0.8945}