Generalization

| Modes | Description |
|--|--|
| Environment | Pytorch , Python |
| Problem Description | Binary class Classification to classify correct ants and bees. |
| Train Data shape | 244,2 |
| Test Data shape | 153,2 |
| Cross Validation | K-Fold Number of splits (5) |
| Batch Size | 16 |
| Loss Function | nn.CrossEntropyLoss() |
| Learning rate/Scheduler/Early Stopping | .0005 / Yes / Yes |
| Model | Resnet 18/Resnet 34 |
| Augmentation | Albumenations |

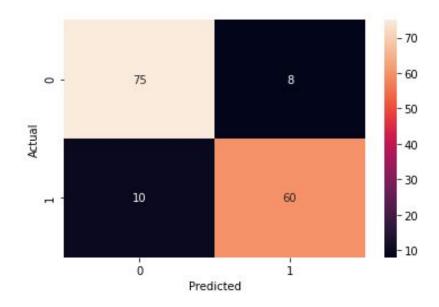
Augmentation Techniques Below

| Train | Resize(256 , 256) | Normalize | Flip | ShiftScaleRotate |
|-------|-------------------|-----------|------|------------------|
| Val | Resize(256 , 256) | Normalize | | |
| Test | Resize(256 , 256) | Normalize | | |

Model Accuracy

| Model | Number of Parameters | Accuracy on Test |
|-----------|----------------------|------------------|
| Resnet 18 | 1026 | 0.882 |
| Resnet 34 | 1026 | 0.9084 |

Confusion Matrix of Resnet 18



Confusion Matrix of Resnet 34

