

To improve the performance of the CNN model, I made the following enhancements:

1. **Added more layers:** I used two convolutional layers followed by max pooling layers to increase the model's capacity to extract features.
2. **Dropout:** I applied dropout (rate = 0.5) after the fully connected layer to reduce overfitting.
3. **Batch normalization:** BatchNormalization layers were added after each convolutional layer to stabilize and accelerate training.
4. **Data augmentation:** I used image augmentation techniques such as horizontal flipping, zooming, shifting, and rotation to enrich the training data and improve generalization.

The final accuracies of my CNN model are:

- **Training accuracy:** 78.21%
- **Validation accuracy:** 77.58%
- **Test accuracy:** 76.99%