SKILLCONNECT
Innovating Engineering!

Week 2: Advanced Challenge

Agenda: Computer Vision (CNN) using Keras

Topics Covered: CNN model, Transfer Learning

Problem Statement

Develop a Google Colab notebook with well documented code for the following topics. Each topic must be shown in a separate section using “text” cells in the colab.

1. Learn to develop your own architecture for image classification task
2. Use popular pretrained architectures for transfer learning and show comparison of results.

Dataset: Any Vision Classification dataset.

*Caution: Don’t use MNIST dataset! You something which isn’t widely used. You can find a lot of datasets at Kaggle.

Results:

The github repository should contain following list of files

1. Trained models
2. Google Colab or Python Code used for developing and training the model
3. Flask server
4. UI for uploading sample Image.
5. UI page for showing and comparing results of different models
6. Refer to the README file mentioned in point 2 in the reference section for the expected UI part.

NOTE: Flask server and UI is required for participating in Full Scale Projects.

Resource References

1. CS231n Convolutional Neural Networks for Visual Recognition
2. For flask server and UI pages: https://github.com/shubham99bisht/Intrusion-Detection-using-ML
3. Sample UI: (Refer to README file in above link.)