Google Cloud

Module 4 Readings: Computer Vision Fundamentals on Google Cloud

Here are the assembled readings provided in Module 4.

Module 4: Convolutional Neural Networks

- Lesson 2: Convolutional Neural Networks
  - Neocognitron
  - Visual nervous system
  - Deep Learning
  - Initial CNN architecture
  - AlexNet
  - The concept of hierarchy
  - Google's Own Inception network
- Lesson 4: CNN Model Parameters
  - 2-dimensional convolution layer in Keras
- Lesson 5: Working with Pooling Layers
  - Pooling layers in Keras
- Lesson 6: Implementing CNNs on Vertex AI with pre-built TF container using Vertex Workbench
  - National Institute of Standards and Technology
  - Softmax Function
- Lab intro:
  - MNIST
  - tf.keras API
  - tf.image.stateless_random_brightness
  - tf.image.stateless_random_contrast
  - tf.image.stateless_random_crop
  - tf.image modules for data augmentation
  - tf.py_function
  - https://keras.io/api/layers/preprocessing_layers/image_preprocessing/
- Lesson 5: Transfer Learning
  - MobileNet