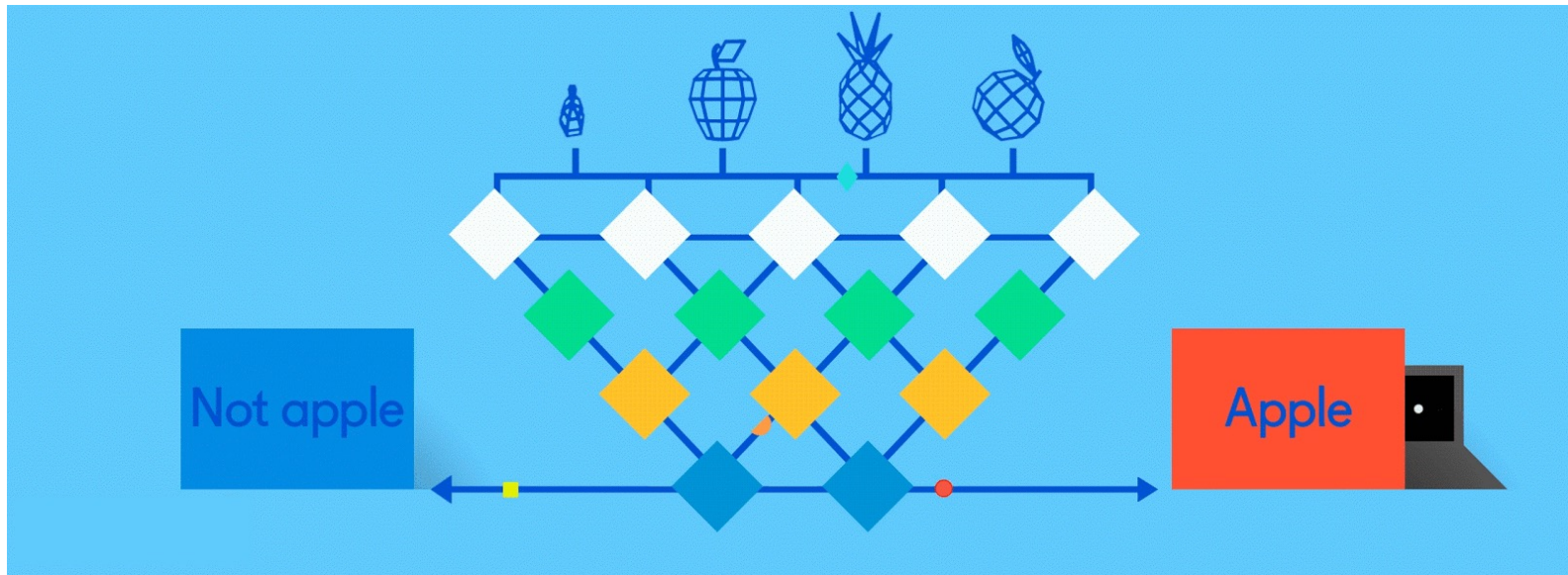


Neural Networks for Machine Learning demonstrations



Neural Network Architectures

Current focus on large networks with different “architectures” suited for different kinds of tasks

- Feedforward Neural Network (aka MLP)
- CNN: Convolutional Neural Network
- RNN: Recurrent Neural Network
- LSTM: Long Short Term Memory
- Transformer

Neural Network Colab Notebooks

The screenshot shows a Google Drive interface with the following elements:

- Browser:** Chrome browser with the address bar showing `drive.google.com`.
- Search:** A search bar with the text "Search in Drive".
- Navigation:** A breadcrumb path: "My Drive > AI Colab Notebooks > 09 Neural networks".
- Left Sidebar:** Contains navigation options: "New", "My Drive", "Shared with me", "Recent", "Starred", "Trash", and "Storage" (12.8 GB of 19 GB used).
- Main Content Area:** Displays a grid of Colab notebooks:
 - 00_MLP.ipynb:** Preview shows text: "The multi-layer perceptron is the simplest neural network architecture and the only one that scikit learn supports" and code: `from sklearn.neural_network import MLPClassifier`.
 - 01_MNIST.ipynb:** Preview shows the Colab logo.
 - 02_CNN_MNIST.ipynb:** Preview shows title "Classifying digits with convolutional neural networks" and text "This notebook contains the solution to the MNIST activity.".
 - 03_CNN_fashion.ipynb:** Preview shows the Colab logo.
 - 04_text_classification...**: Preview shows the Colab logo.
 - 05_RNN_text classific...**: Preview shows the Colab logo.
 - 06_transformer_gpt2...**: Preview shows a document icon.