Lecture Notes for

Machine Learning in Python

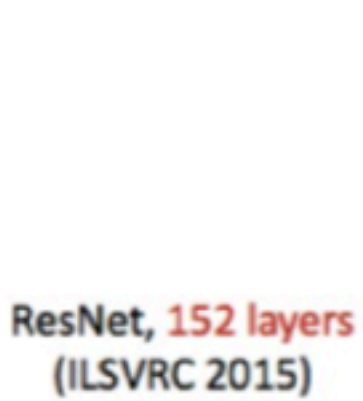
Professor Eric Larson

Demonstration of More Advanced Convolutional Neural Networks

Class logistics and Agenda

- CNNs due next week
- Agenda:
  - More Advanced CNN Demo
  - CNN Town Hall
  - Introduction to RNNs

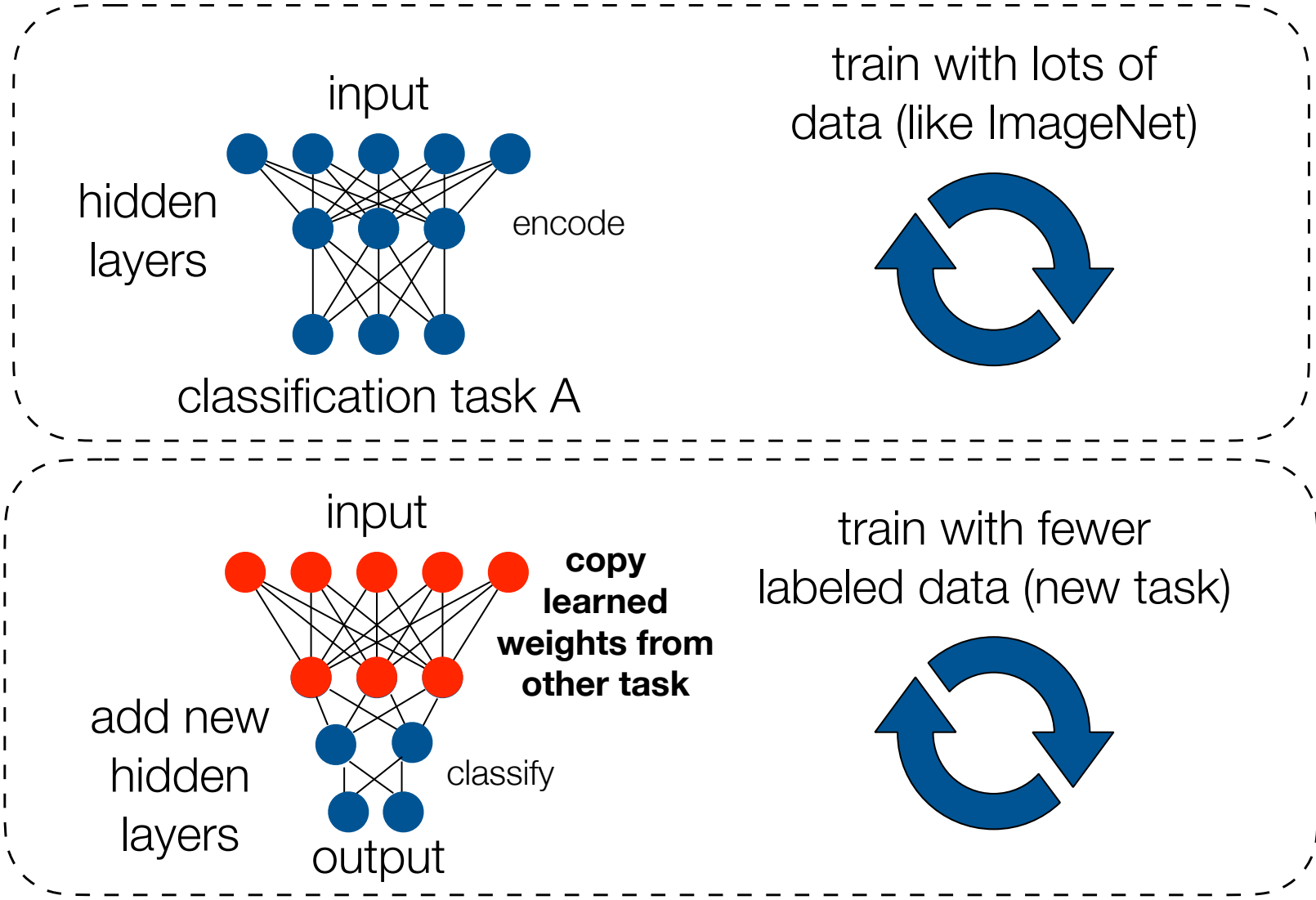
Last Time:



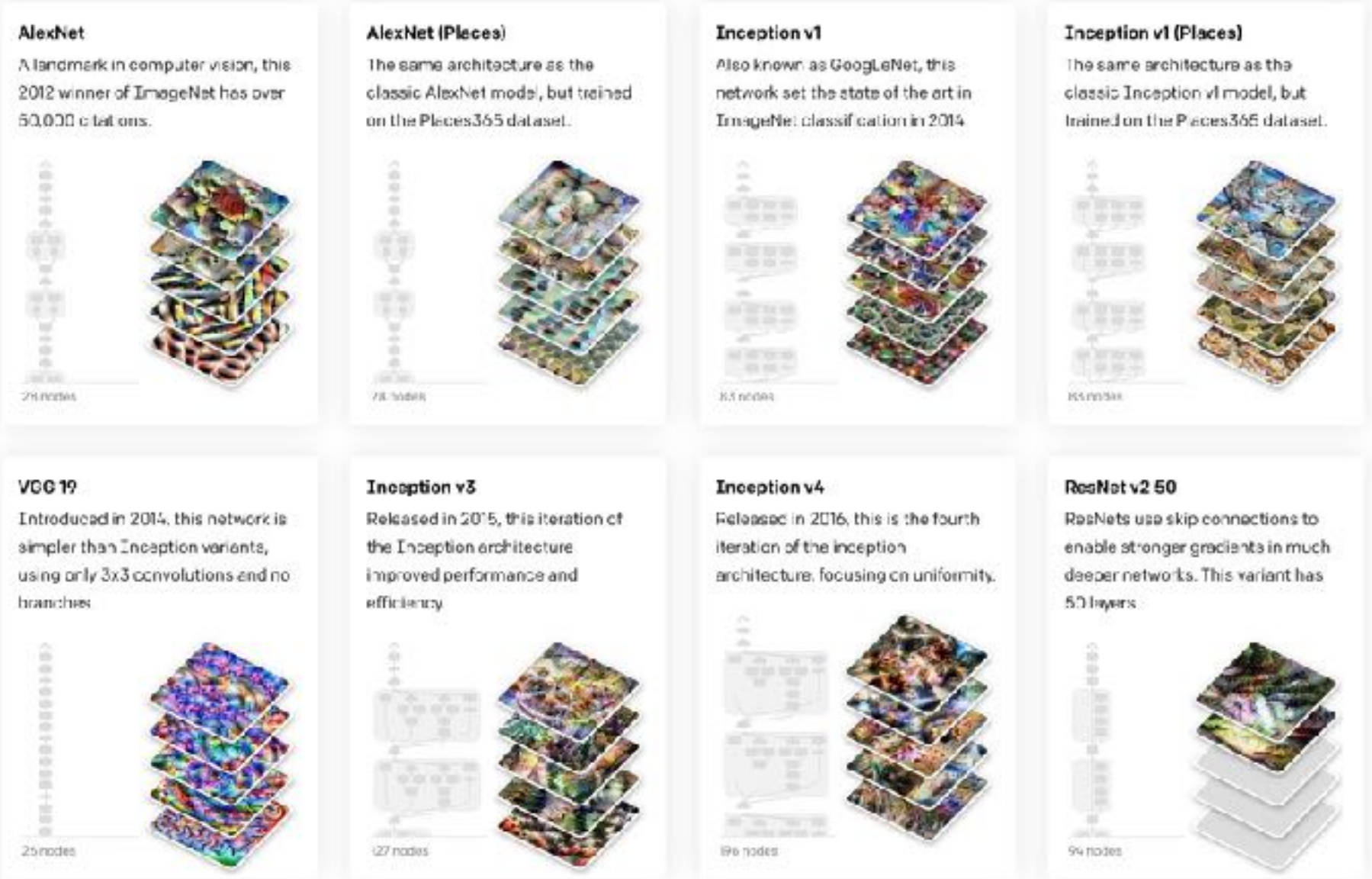
- Bottlenecks
- Parallel Paths, Concatenation
- Residual Paths
- Separable Convolution

Transfer Learning

- transfer learning: a basic primer



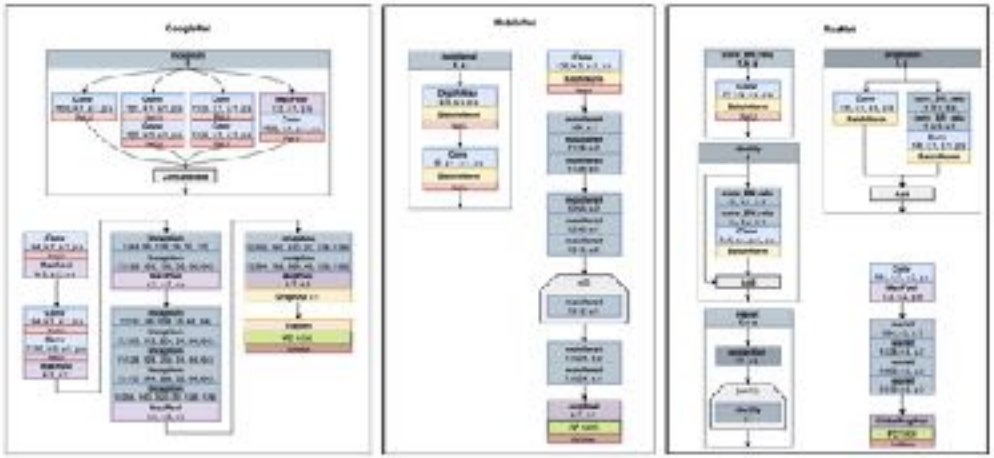
Many Pre-trained Models to choose from!



Even more Convolutional Neural Networks

…in TensorFlow

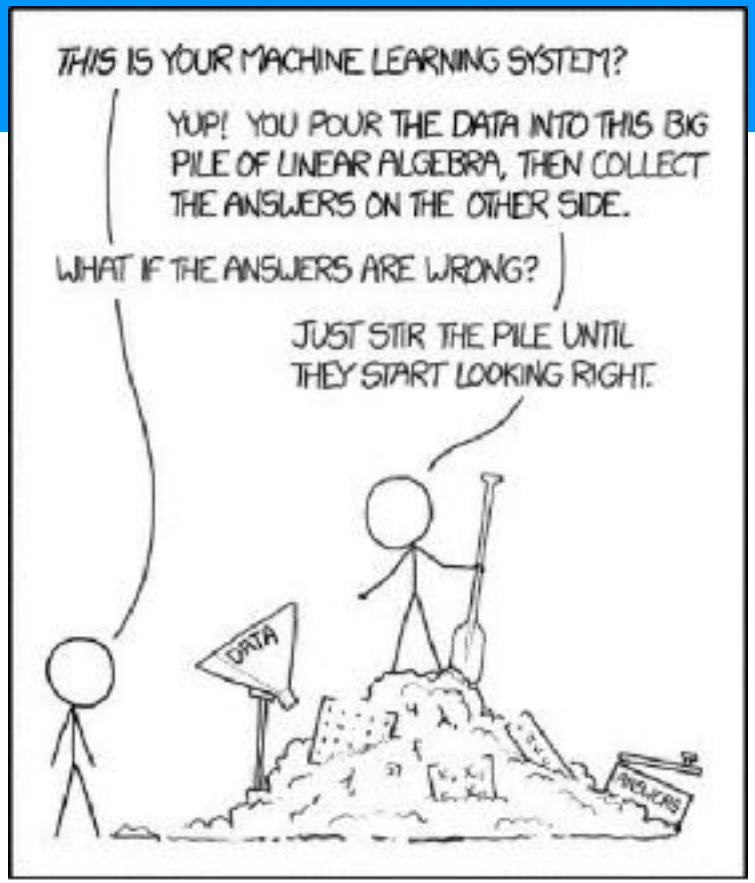
…with Keras



Demo

12. More Advanced CNN Techniques.ipynb

CNN Town Hall



Machine Learning 101

Next Time:

- Intro to Recurrent Neural Network Architectures
  - RNNs, GRUs, LSTMs
  - Ethics by Case Study