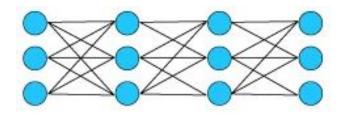
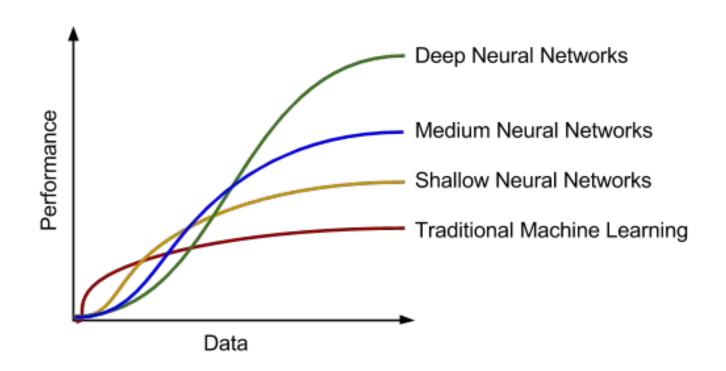
Deep Learning

= Training Deep Neural Networks

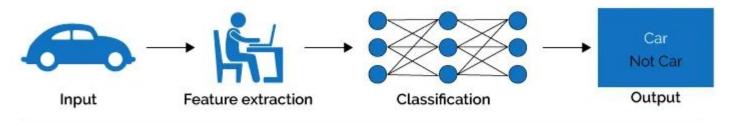


ML vs DL

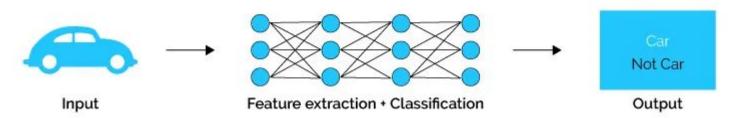


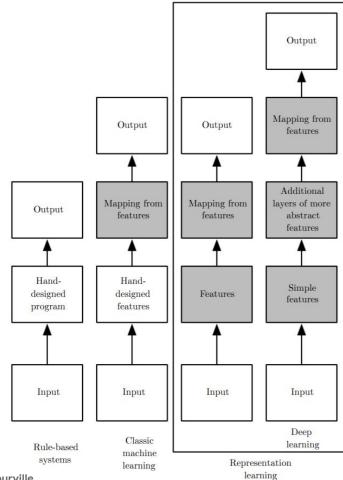
ML vs DL

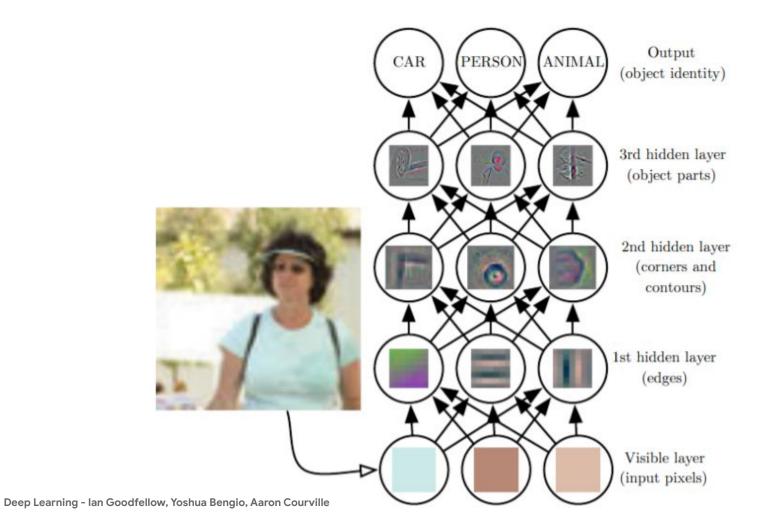
Machine Learning



Deep Learning







In general,

MORE LAYERS = MORE FEATURE ABSTRACTIONS

Why Deep Learning NOW?

- Data
- Hardware
- Community







TEXT-to-SPEECH

SPEECH RECOGNITION

IMAGE RECOGNITION

GAME PLAYING

MEDICAL DIAGNOSIS DIGITAL ASSISTANCE

RECOMMENDATION SYSTEM

SELF DRIVING CARS

FACE RECOGNITION

Training a neural network

Repeat for *n* epochs:

- Forward Propagation
- Loss Calculation
 - Cross Entropy
- Backpropagation
 - Gradient Descent

$$\sum_{i=1}^{m} (w_i x_i) + bias$$

