Deadline: You must submit this week's assignments by **December 3, 2017, 11:59 PM PST**.

Deep Neural Networks

Understand the key computations underlying deep learning, use them to build and train deep neural networks, and apply it to computer vision.

Learning Objectives

See deep neural networks as successive blocks put one after each other

Build and train a deep L-layer Neural Network

Analyze matrix and vector dimensions to check neural network implementations.

Understand how to use a cache to pass information from forward propagation to back propagation.

Understand the role of hyperparameters in deep learning

Less

Deep Neural Network

- Deep L-layer neural network 5 min
- Forward Propagation in a Deep Network 7 min
- Getting your matrix dimensions right 11 min
- Why deep representations? 10 min
- Building blocks of deep neural networks 8 min
- Forward and Backward Propagation 10 min
- Parameters vs Hyperparameters 7 min
- What does this have to do with the brain? 3 min

Practice Questions

- **Quiz:** Key concepts on Deep Neural Networks 10 questions

Programming Assignments

- ✓ Building your Deep Neural Network: Step by Step 2h 30m

- ● **Programming Assignment:** Building your deep neural network: Step by Step

- </> Deep Neural Network - Application 1h

- ● **Programming Assignment:** Deep Neural Network Application