

Intermediate Theano

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Overview

- Review of Theano Introduction
 - Symbolic and shared variables
 - Updating shared variables using gradient method
- Artificial Neural Networks and Deep Learning
 - Terminology and basic concepts
- Running a Basic Model
 - Solve the XOR problem

Resources

- Datasets and Visualization Code:
 - <https://github.com/torch/nn/blob/master/doc/training.md>
 - http://scikit-learn.org/stable/auto_examples/gaussian_process/plot_gpc_xor.html
 - http://pymc-devs.github.io/pymc3/notebooks/bayesian_neural_network_advi.html
 - http://scikit-learn.org/stable/auto_examples/classification/plot_classifier_comparison.html#sphx-glr-auto-examples-classification-plot-classifier-comparison-py
- Neural Network Playground:
 - <http://playground.tensorflow.org/>
- Images:
 - http://ufldl.stanford.edu/wiki/index.php/Neural_Networks