Computer Science > Computer Vision and Pattern Recognition

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Going Deeper with Convolutions

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We propose a deep convolutional neural network architecture codenamed "Inception", which was responsible for setting the new state of the art for classification and detection in the ImageNet Large-Scale Visual Recognition Challenge 2014 (ILSVRC 2014). The main hallmark of this architecture is the improved utilization of the computing resources inside the network. This was achieved by a carefully crafted design that allows for increasing the depth and width of the network while keeping the computational budget constant. To optimize quality, the architectural decisions were based on the Hebbian principle and the intuition of multi-scale processing. One particular incarnation used in our submission for ILSVRC 2014 is called GoogLeNet, a 22 layers deep network, the

quality of which is assessed in the context of classification and detection.

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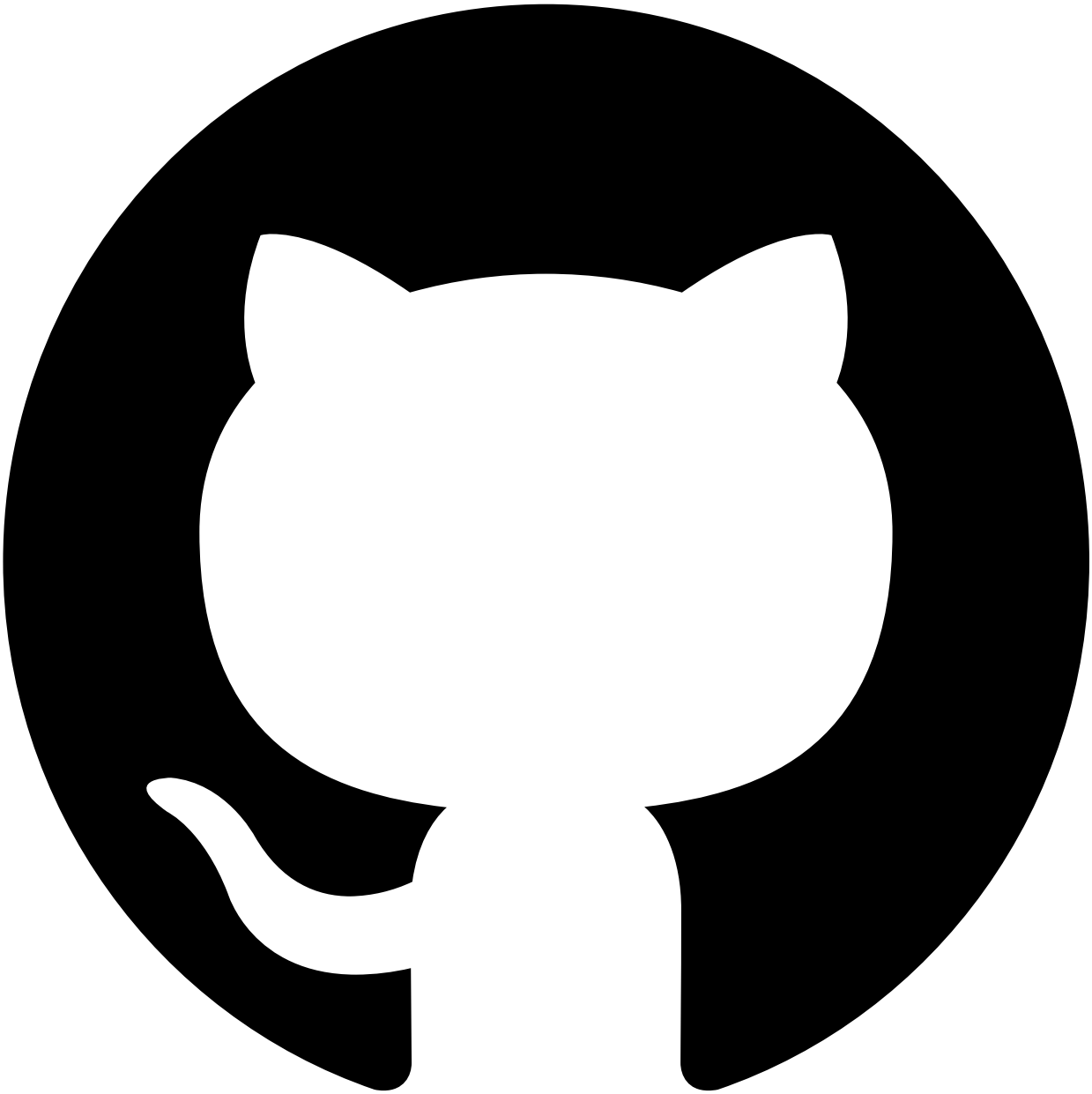
Official Code



https://worksheets.codalab.org/worksheets/0xbcd424d2bf544c4786efcc0063759b1a

Community Code

64 code implementations (in TensorFlow, PyTorch, Torch and Caffe2)

Datasets Used

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