

1 Basic Usage

Tensorflow is a programming system in which you represent computation as graphs.

Nodes in the graph are called 'ops'.

An op takes zero or more tensors. A tensor is a typed multidimensional array.

A graph must be launched in a Session. A session places methods to execute them (Cpu, Gpu).

These methods return tensors produced by ops as numpy ndarray objects in python.

Tensorflow use a tensor data structure to represent all data- only tensors are passed between operations in the computation graph. A tensor has static type a rank and a shape.

A Tensor rank is not the same as matrix rank. Tensor rank is the number of dimensions of the tensor. Rank 0 means Scalar, Rank 1 means vector and rank 2 = matrix rank 3 = 3-Tensor (cube of numbers)

Todo read tensorflow API on How to s and basic instruction.