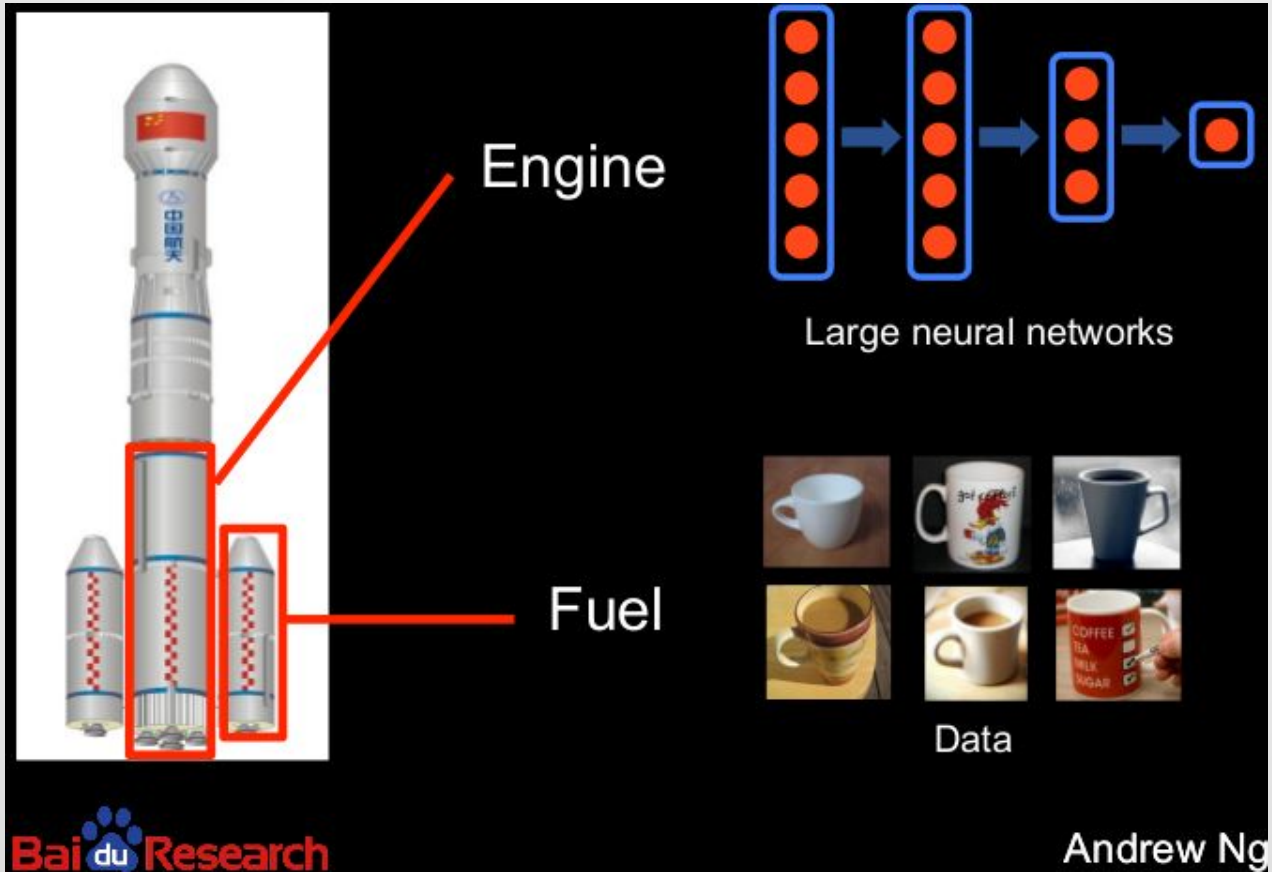
Fuel Framework

MindLab research group

Why is Deep Learning taking off?



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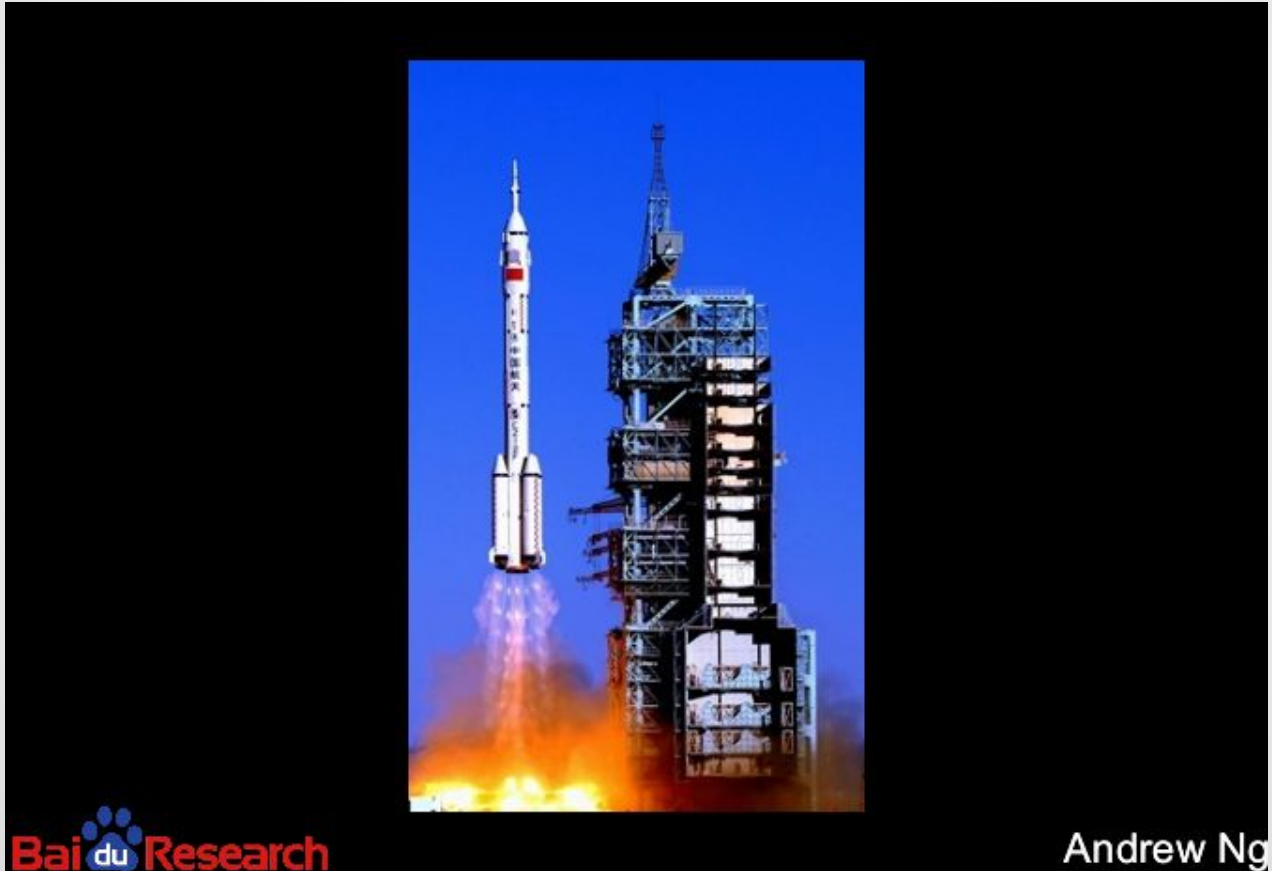
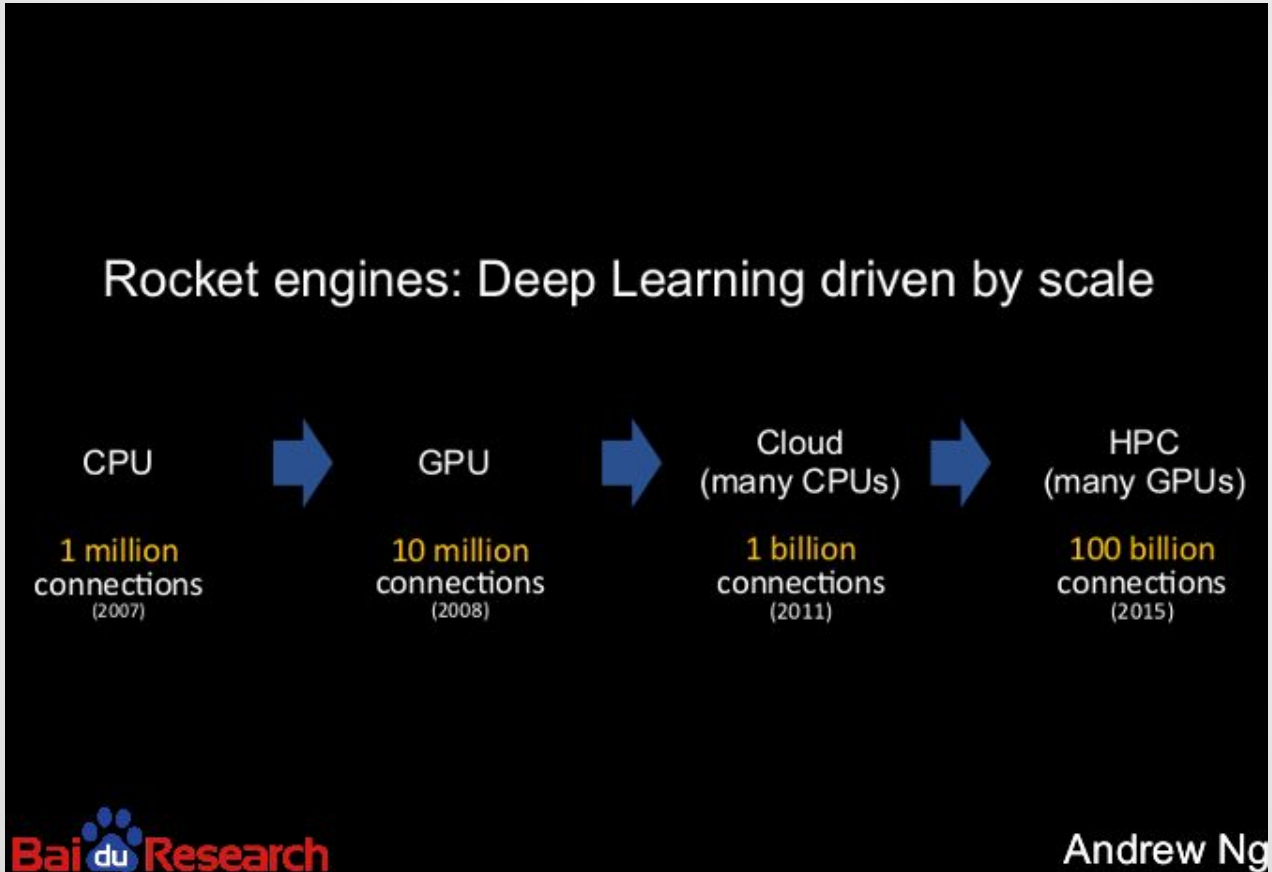


Baidu Research

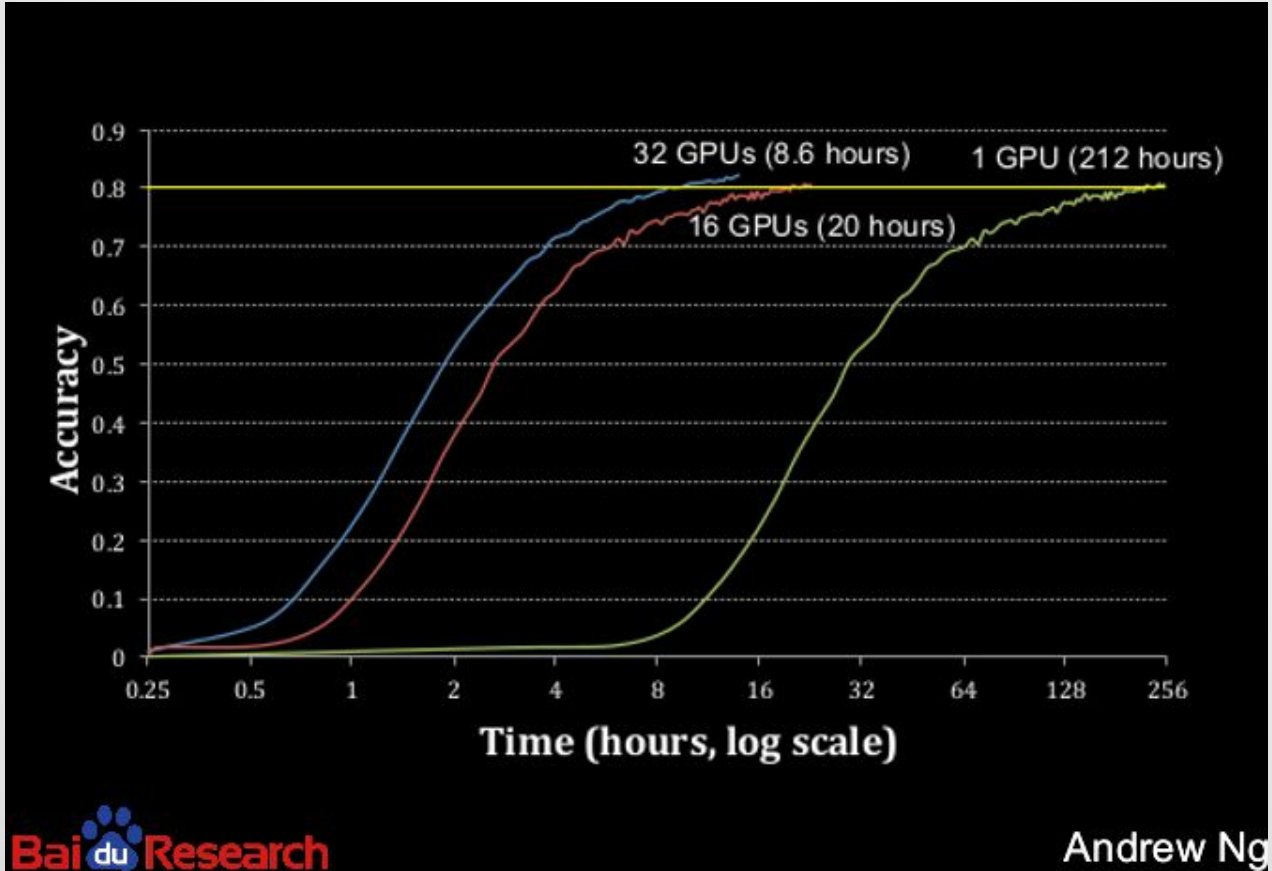
Andrew Ng

MiND LAB

About the engine...



The importance of strong scaling



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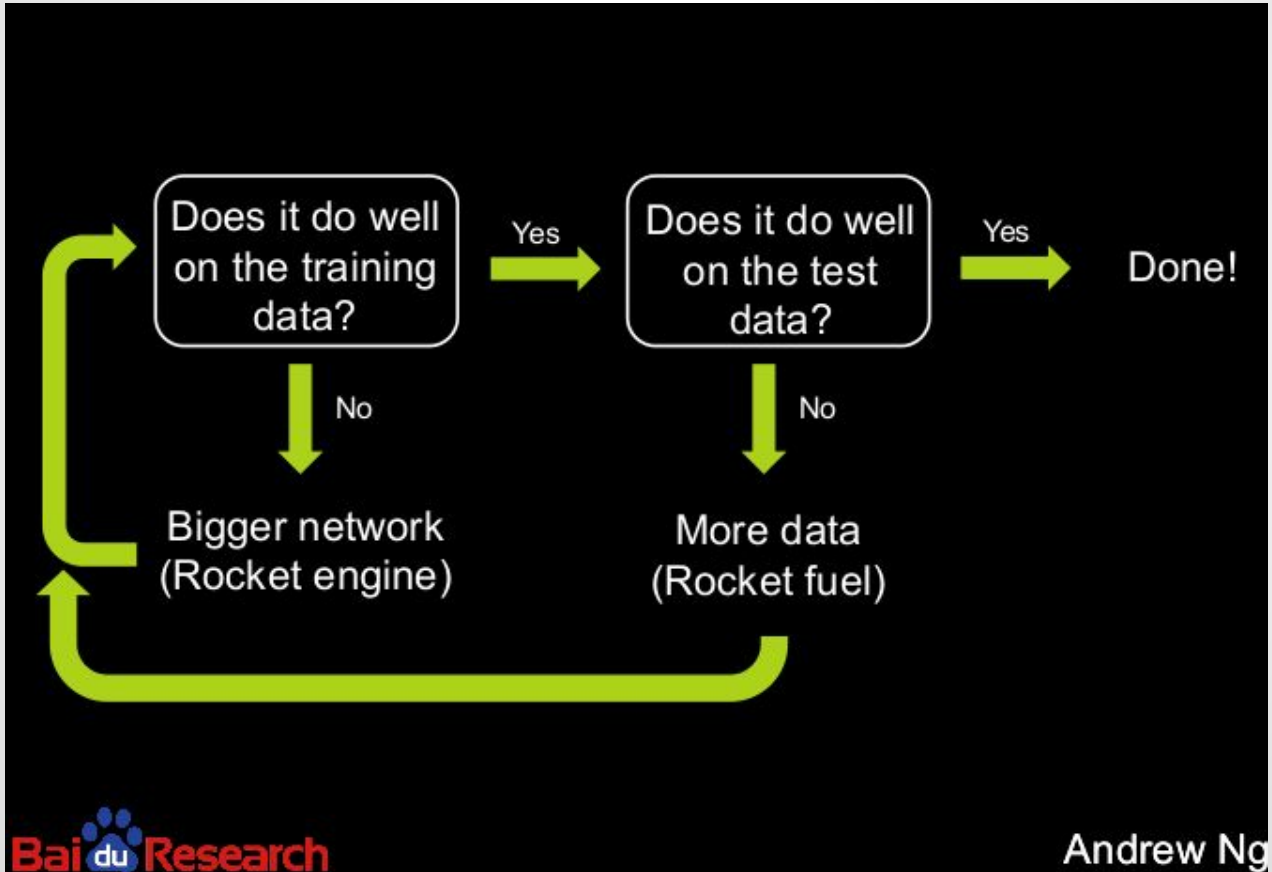
Basic recipe for machine learning



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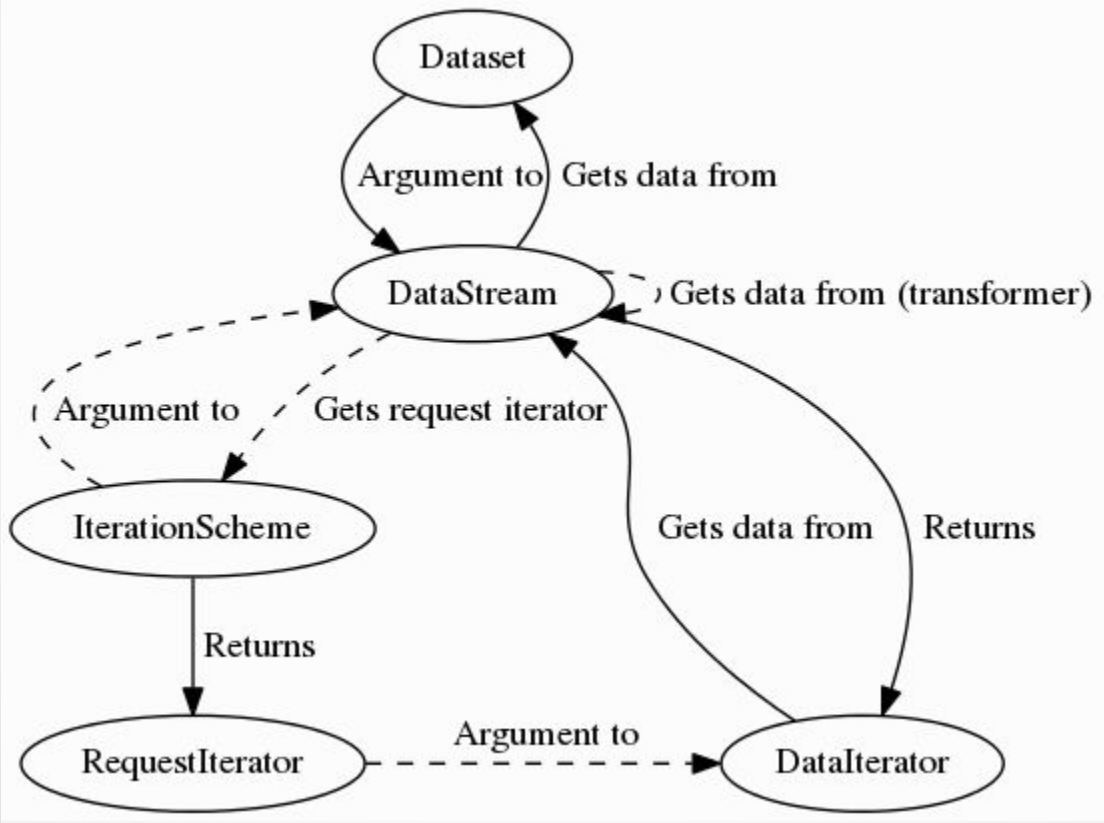
About the Fuel… Fuel framework!

Fuel is a data pipeline framework which provides your machine learning models with the data they need.

Warning

Fuel is a new project which is still under development. As such, certain (all) parts of the framework are subject to change. The last stable (but possibly outdated) release can be found in the `stable` branch.

Schematic overview of Fuel



Further info

- Fuel documentation
- Fuel user's group
- Tutorial

Blocks Framework

MindLab research group

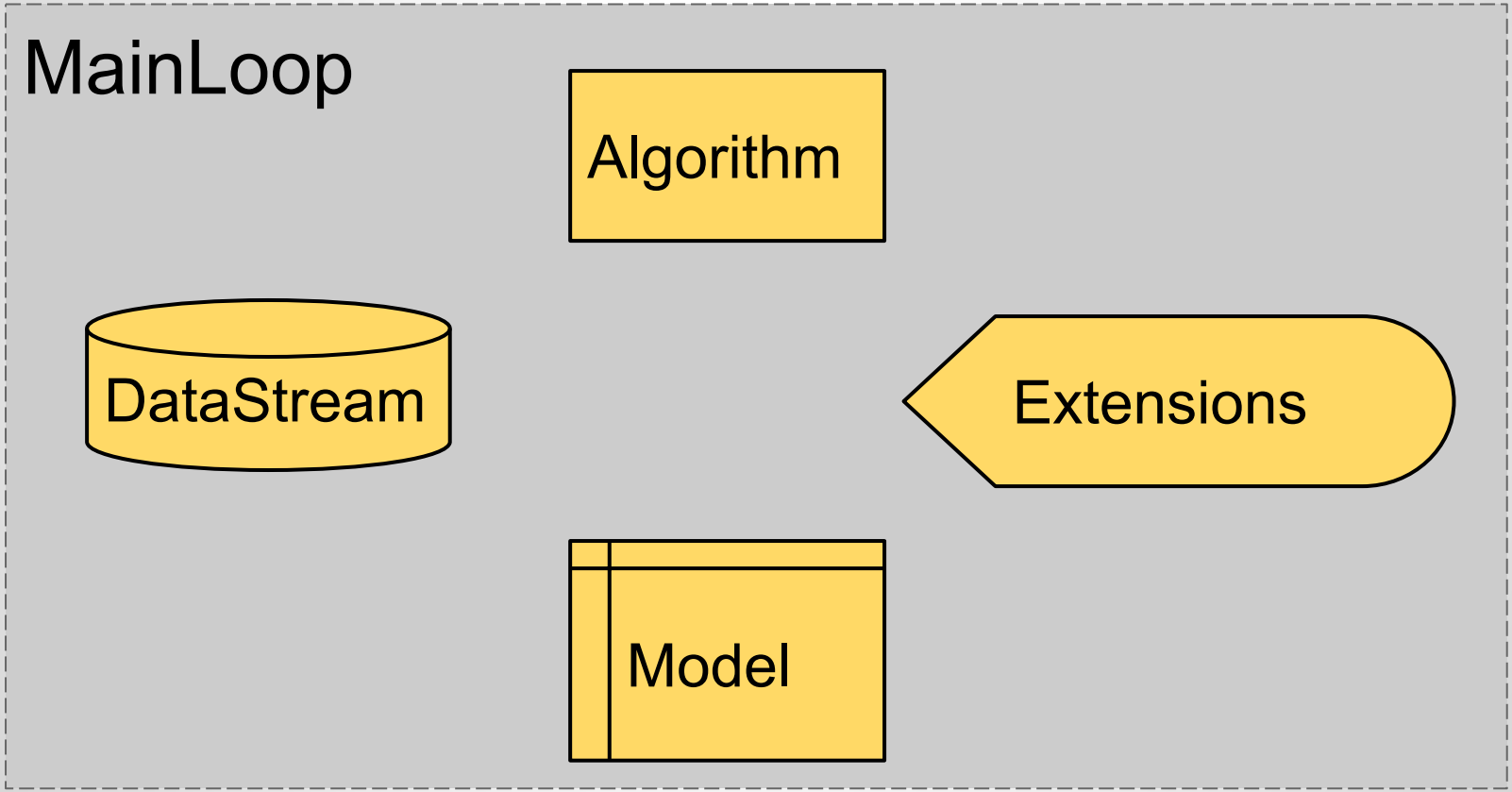
The Blocks framework

Blocks is a framework that helps you build and manage neural network models on using Theano.

Warning

Blocks is a new project which is still under development. As such, certain (all) parts of the framework are subject to change. The last stable (and thus likely an outdated) version can be found in the `stable` branch.

Blocks components



Ex 1: Softmax regression with Iris

Dataset: IRIS

Model: Softmax

Algorithm: Gradient descent

Extensions: Printing

Ex 2: MNIST with MLP

Dataset: MNIST

Model: Hybrid MLP

Algorithm: Gradient descent with momentum

Extensions: Printing, Plotting, etc.