The pylearn2 machine learning environment

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Pylearn2 is [1]:

> "... a machine learning research library. This does not just mean that it is a collection of machine learning algorithms that share a common API; it means that it has been designed for flexibility and extensibility in order to facilitate research projects that involve new or unusual use cases. In this paper we give a brief history of the library, an overview of its basic philosophy, a summary of the library's architecture, and a description of how the Pylearn2 community functions socially."

Pylearn2 is built on top of the Python programming language using the Theano array handling library.

The aim of this project is to explore how Pylearn2 can be applied to the problem of image recognition, for example how do you tell if a picture contains a dog or a cat. [4]

Familiarity with Python programming will be required to use Pylearn2.

1. Ian J. Goodfellow, David Warde-Farley, Pascal Lamblin, Vincent Dumoulin, Mehdi Mirza, Razvan Pascanu, James Bergstra, Frédéric Bastien, and Yoshua Bengio. "Pylearn2: a machine learning research library". arXiv:1308.4214

2. http://deeplearning.net/software/pylearn2/

3. http://deeplearning.net/software/theano/

4. http://www.kaggle.com/c/dogs-vs-cats