PyAI Documentation

Release 0.1.dev2

Jérémie DECOCK

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A set of open source frameworks for Artificial Intelligence (mostly machine learning and optimization).

Note:

This project is still in beta stage, so the API is not finalized yet.

Contents:

CHAPTER 1

Introduction

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- Web site: http://www.jdhp.org/software_en.html#pyai
- Online documentation: http://pyai.readthedocs.org
- Source code: https://github.com/jeremiedecock/pyai
- Issue tracker: https://github.com/jeremiedecock/pyai/issues
- pyai on PyPI: https://pypi.python.org/pypi/jdhp-pyai

Description

This is a set of open source frameworks for Artificial Intelligence (mostly machine learning and optimization).

This contains (among others):

- a blackbox non linear noisy optimization framework;
- a machine learning framework;
- a multistage optimization and Markov Decision Process framework (Markov Decision Processes).

Note:

This project is still in beta stage, so the API is not finalized yet.

Dependencies

- Python >= 3.0
- Numpy
- Matplotlib

Installation

Gnu/Linux

You can install, upgrade, uninstall PyAI with these commands (in a terminal):

```
pip install --pre jdhp-pyai
pip install --upgrade jdhp-pyai
pip uninstall jdhp-pyai
```

Or, if you have downloaded the PyAI source code:

```
python3 setup.py install
```

Windows

You can install, upgrade, uninstall PyAI with these commands (in a command prompt):

```
py -m pip install --pre jdhp-pyai
py -m pip install --upgrade jdhp-pyai
py -m pip uninstall jdhp-pyai
```

Or, if you have downloaded the PyAI source code:

```
py setup.py install
```

MacOSX

You can install, upgrade, uninstall PyAI with these commands (in a terminal):

```
pip install --pre jdhp-pyai
pip install --upgrade jdhp-pyai
pip uninstall jdhp-pyai
```

Or, if you have downloaded the PyAI source code:

```
python3 setup.py install
```

Documentation

- Online documentation: http://pyai.readthedocs.org
- API documentation: http://pyai.readthedocs.org/en/latest/api.html

Example usage

TODO

Bug reports

To search for bugs or report them, please use the PyAI Bug Tracker at:

https://github.com/jeremiedecock/pyai/issues

License

This project is provided under the terms and conditions of the MIT License.

Indices and tables

- genindex
- modindex
- search

CHAPTER 2

API

The library provides classes which are usable by third party tools.

Note: This project is still in *beta* stage, so the API is not finalized yet.

Modules:

TODO_PYTHON_PACKAGE_NAME.TODO_PACKAGE_NAME

CHAPTER 3

Developer's notes

Source code

The source code is currently available on GitHub under the terms and conditions of the MIT license. Fork away!

Bug reports

To search for bugs or report them, please use the Bug Tracker at:

> https://github.com/jeremiedecock/pyai/issues

Contribute

This project is written for Python 3.x. Python 2.x is *not* supported.

The TODO.md file contains the TODO list.

All contributions should at least comply with the following PEPs:

- PEP8 "Python's good practices"
- PEP257 "Docstring Conventions"
- PEP287 "reStructuredText Docstring Format"

All contribution should be properly documented and tested with unittest and/or doctest.

pylint, pep8 and pyflakes should also be used to check the quality of each module.

Docstrings should be compatible with the Sphinx "napoleon" extension and follow the Numpy style:

- Please follow this guide
- Be inspired by these examples

Changes

0.1 (????-??-??)

Initial version

0.2 (????-??-??)

Changes:

- switch to Python 3
- update the docstrings
- change the package name (*pyai*)
- miscellaneous updates and bug fixes

Packaging:

- write the *setup.py* file
- write a script to automatically build the Debian package
- Web site: http://www.jdhp.org/software_en.html#pyai
- Online documentation: http://pyai.readthedocs.org
- Source code: https://github.com/jeremiedecock/pyai
- Issue tracker: https://github.com/jeremiedecock/pyai/issues
- pyai on PyPI: https://pypi.python.org/pypi/jdhp-pyai

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Indices and tables

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CHAPTER 5

Credits

Jérémie DECOCK <jd.jdhp@gmail.com> (www.jdhp.org)

CHAPTER 6

License

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The MIT License

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