Introdução a PyMC3

PyMC3

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Last Commit

11d ago

Total Commits

8,388

In last 12 months

655

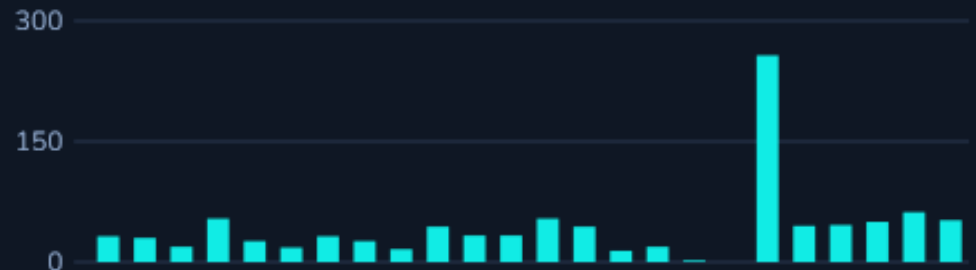
Commit frequency over last 12 months

Every 13 hours

Monthly Commits

62

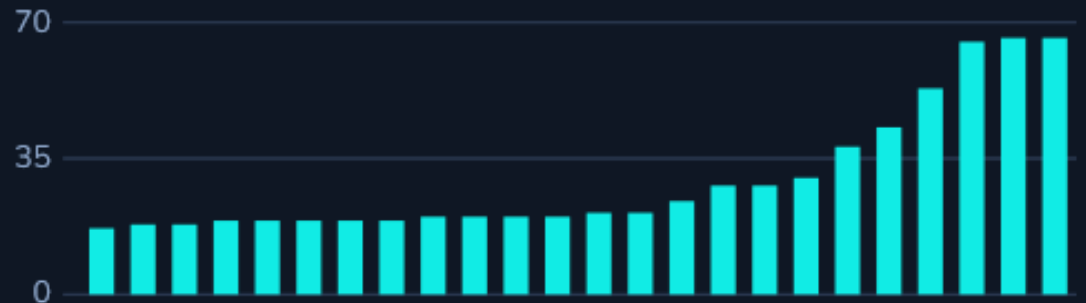
Last month



Open Issues

206

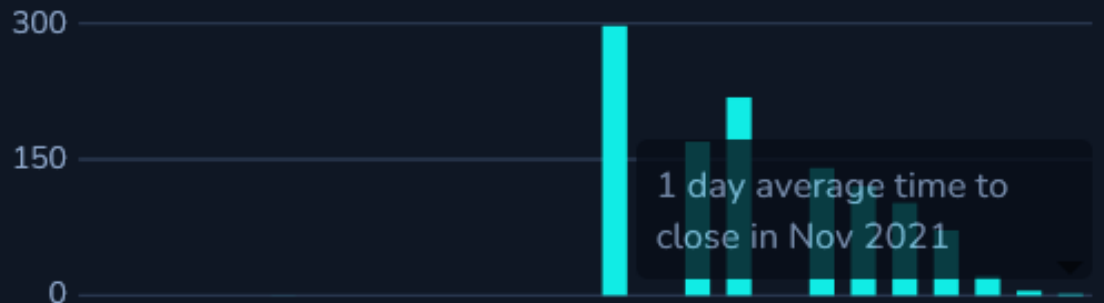
Last month



Average time to close issues

33h

Last month



Time to close issues

- Less Than a Day 48%
- 1 - 7 Days 10%
- 8 - 13 Days 5%
- Over 30 Days 20%
- Not Fixed Yet 17%

Instalação

- ~~pip install pymc3~~
  - conda install -c conda-forge pymc3 mkl-service
  - pip install git+https://github.com/pymc-devs/pymc

theano

ArviZ

michaelosthege commented on 23 Jul — Member

If you cloned the repo from https://github.com/pymc-devs/pymc3 you have the latest development version which already depends on Aesara.
I just created an environment successfully with these steps:

1. `conda create -n pm3v4 -c conda-forge "python=3.8" libpython mkl-service m2w64-toolchain numba python-graphviz scipy`
2. `conda activate pm3v4`
3. `git clone https://github.com/pymc-devs/pymc3`
4. `cd pymc3`
5. `pip install -c .`

That latest version is still missing a few distributions, but for simple things the GP submodule should be fine already.

Recapitulando...

Métodos de inferência

Sampling

- NUTS
- Metropolis

Inferência Variacional

- ADVI
- SVGD
- Minibatches

Vantagens

- Existe muita documentação
- Linguagem frequentemente atualizada e melhorada
- Dispõe de vários modelos
- Sintax intuitiva

Desvantagens

- Pressupõe um conhecimento detalhado de redes neuronais
- Conflito de versões de pacotes
- Documentação nem sempre atualizada

Para consultas futuras

- https://openbase.com/python/pymc3
- https://docs.pymc.io/en/stable/nb_examples/index.html
- https://notebook.community/akuz/pymc3/docs/notebooks/getting_started
- https://youtube.com/playlist?list=PL1Ma_1DBbE82OVW8Fz_6Ts1oOeyOAiovy
- https://colab.research.google.com/github/OriolAbril/oriol_unraveled/blob/master/_notebooks/2020-06-20-plot-trace.ipynb#scrollTo=Fw34hr0oL6yT
- https://github.com/pymc-devs
- https://twitter.com/pymc_devs