

Intro to bymc :-

Probabilistic Programming

- Way to write Bayesian models in code
- Lets user define probabilistic models & run Bayesian Models without deriving equations.

What is PyMC?

- An open source probabilistic programming framework written in python.
- Allows users to specify Bayesian models without using simple python code.
- Makes Bayesian modeling easier, more flexible, etc.

Why is PYMC Powerful?

① Modern MCMC Algorithms

- Uses Hamiltonian Monte Carlo (HMC) and its Improved version NUTS (No-U-Turn-Sampler) →
 - i) Tune themselves automatically
 - ii) Work well with High dimensional, complex posteriors.

② Automatic Gradient via Pytensor

- Use Pytensor for:-
 - Automatic differentiation
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