

# Bayesian analysis in pyfolio

- Sneak-peek into ongoing research.
- Primary focus is comparing backtest (in-sample) and forward-test (out-of-sample; OOS).
- Sophisticated statistical modeling takes *uncertainty* into account.
- Uses T-distribution to model returns (instead of normal).
  - Addresses ‘fat-tail’ nature of financial returns
- Relies on PyMC3.
  - Python module for Bayesian statistical modeling and model fitting which focuses on advanced Markov chain Monte Carlo fitting algorithms.