Final Semester Project - EST5527

Write a scientific paper on Bayesian methods in time series models with applications to real data. Describe the problem, the data and the objectives of your analysis. Describe the methodology and algorithms. Give details on specification of your prior distributions, algorithms and computational costs. Discuss further questions that might have been raised by your study and how they might be investigated in a future work.

The work must include at least the following sections,

1. First page: title, author and abstract.
2. First Section: Introduction.
3. Last Section: Discussion.
4. Bibliography (bibtex recommended)

Also,

- The work must be written in Latex with a final format Adobe PDF (use the file name yourlastname-report.pdf).
- It should have no more than 15 1.5-spaced pages (not including listings of raw data, computer output and computer code.
- All figures and tables included must be commented.

The paper that you are preparing or have submmited with your supervisor is not acceptable. This work must be as original as possible and should have the potential to become a real paper. Plagiarism checkers will be employed. Do not use tables and figures from other papers.

Time series data

- Organization for Economic Co-operation and Development (OECD)
- The National Bureau of Economic Research
- Time Series Data Library
- IPEADATA
- Economagic.com: Economic Time Series Page
- Macroeconomic Time Series
- National Environmental Satellite. Data and Information Center
- Banco de Informações Econômicas e Financeiras do Banco Central
- ECONSTATS - Global Economic Data
- Goddard Institute for Space Studies - NASA
- U.S. Department of Labor (Bureau of Labor Statistics)
- World Bank Development indicators
- NSW Bureau of Crime Statistics and Research

Some R packages

- World Bank Development indicators for R
- Quantitative Financial Modelling & Trading Framework for R
- R Interface to Brazilian Central Bank Web Services
- GetTDData: Get Data for Brazilian Bonds (Tesouro Direto)
- Time Series Data from the Australian Bureau of Statistics