

STAT6494: Seminar in Applied Statistics – Advanced Time Series

Instructor: Nalini Ravishanker

Department of Statistics

e-mail: nalini.ravishanker@uconn.edu

URL: <http://www.stat.uconn.edu/~nalini>

Topics Covered

1. Dynamic Models (State Space Models) for Time Series
2. Vector AR Modeling in Low and High-dimensional setup.
3. Nonlinear Models for High-Frequency Time Series.
4. Clustering (time and frequency domain)

Recommended Reading:

Time Series Analysis and its Applications. R. H. Shumway and D. S. Stoffer. Third Edition, 2010, Springer-Verlag.

Dynamic Time Series Models using R-INLA: An Applied Perspective. Ravishanker, Raman, and Soyer. Chapman & Hall/CRC (to be published) 2022.

Research articles on the different topics.

There will be no exams in this course. The course grade will be based on class discussions and a well-designed and well-executed class project.