IIT-Hyderabad

One Credit course; Sequence Models- AI-3102, Spring 2023

S. Lakshmivarahan

School of Computer Science

University of Oklahoma

Goal: This one credit, on-line course will provide a broad introduction to the area of Sequence Models and is planned to cover Time Series Analysis and Hidden Markov models.

Modus operandi: The course will be offered in five sessions on April 1, 7, 8, 15 and 22, 2023 with each session running for two-hours. The course timings are from 6.00 to 8.00 pm IST (which is from 7.30 to 9.30 am Central Time in USA on the same day).

Homework and Exam: There will be practice problems given after each class and there will be a final exam on April 30, 2023. The time and duration of the final exam to be decided.

Prerequisites: A good working knowledge of Probability Theory and Statistics and Linear Algebra is assumed. A good facility with programming in R, Python, MATLAB would be beneficial.

Course material: Class notes in the form of slides and handwritten notes will be provided.

References:

J. D. Hamilton (1994) Time Series Analysis, Princeton University Press

A. Blum, J. Hopcroft and R. Kannan (2020) Foundations of Data Science, Cambridge University Press