## EE5601: Representation Learning, Fall 2019 (34)

Indian Institute of Technology Hyderabad

Location & class times: LH1, Block A. C Slot.

**Office hours:** Tuesday 9:00 am – 9:30 am. C-509.

Prerequisites: EE5600, Probability and Random Variables, Linear Algebra.

Website: Google Classroom

Code: cb96hpg

## **References:**

• *The Elements of Statistical Learning*, Jerome Friedman, Trevor Hastie, and Robert Tibshirani. Vol. 1. New York: Springer Series in Statistics, 2001.

• Pattern Recognition and Machine Learning, Christopher M. Bishop 2<sup>nd</sup> edition, Springer.

• Deep Learning, Ian Goodfellow, Yoshua Bengio, Aaron Courville, MIT Press.

**Grading policy:** 50% homework (Python for programming), 50% quiz.

Attendance policy: Mandatory. No makeup quizzes will be given.

**Tentative topical outline:** Clustering and latent variable models, auto-encoders, energy based models, manifold learning, and deep networks.