CPE 779: Machine Learning

Term Project

General

- To enable the students to get hands-on experience in the design, implementation and evaluation of machine learning systems.

- Teams: One students each

- Solve a practical machine learning problem of your choice.

- Use Python.

- Good projects involve using alternative approaches and evaluating their performance in solving the problem.

General

- **Marks:**   **30%**
  - Report   15%
  - Presentation   15%
- **Timing:**
  - Tue 10/7/2018   Submit proposal
  - Sun 5/8/2018   Submit report &

                                              present project

Project Proposal

- One to two-page proposal
- Specify problem
- Specify sample size and source
- Structure
  - Title
  - Student names
  - Problem definition
  - Data description
  - Samples

Research Report

- Four to 8-page report
- Use IEEE A4 conference template at

http://www.ieee.org/conferences_events/conferences/publishing/templates.html

- In the introduction, include
  - Motivation
  - Problem definition
  - Literature review
- Describe your data and development environment.
- Describe any preprocessing, feature extraction and selection, techniques used, and post-processing.
- Give results and comments
- Give conclusions (work done, main results, future work)
- Include your source code in an appendix after the list of references.

Research Presentation

- Prepare Power Point slides

- Ten minutes long

- Must be clear and useful presentation, must add knowledge to fellow colleagues