Machine Learning

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

- Article: **Project-Based Learning for Data Scientists**: Becoming a Data Scientist just became a whole lot easier

- Author: Kishen Sharma

- Link: https://towardsdatascience.com/project-based-learning-for-data-scientists-df6a8f74e4a1

General

- **Marks:**
  - Report   50%
  - Presentation   50%

- **Timing:**
  - Mon 3 May, 2021   Submit proposal
  - Wed 26 May, 2021   Submit report & present project

Project Proposal

- One to two-page proposal
- Specify problem
- Specify sample size and source
- Structure
  - Title
  - Student name
  - 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