**DS-328 Computer Vision**

Assignment # 2 Hand in date: 7/10/23

Spring 2023 Hand out date: 14/10/23

Individual assignment

**Topic: Edge Detection**

* Write detailed note on edge detection techniques with examples including definition, edge filter description and edge detection process.
* Write python code to implement the following edge detectors without using built-in functions. Select images from at least five different categories having different variations e.g., noise, multiple objects etc.
* Observe differences in results and write comparative note in the form of table based on your observations e.g., what type of edge detection technique is best for which image category and why.
  + First order derivative based
    - *Sobel or Prewitt*
  + Second order derivative based
    - *Laplacian or Marr-Hildreth*
  + Canny edge detector
* Submission: Hard form submission during viva.