COL 780: Computer Vision

Assignment 1

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Due Date: Jan 31, 2023

Please take the last 2 digits of your roll no. Lets say it is X. Then, let (Y= X%4)

1. Please implement the Gaussian Mixture Model for Background Subtraction with (IF Y=0) exponentially decaying weights for the past values or (IF Y=1) constant weights for the past N values, OR (IF Y=2) kernel-density based method with decaying weights, or (IF Y=3) with constant weights.
2. Please pair up with one another student with a different problem statement to get his/her results and compare the performance.
3. Please clean up the results with a foreground pixel aggregation method that integrates pixels in a given rectangular region in order to detect objects of a certain size.