CS5543 Real-Time Big Data Analytics Project Proposal
Due: September 2 (F) 2016, 11:59PM

Project Preproposal

Detecting and recognize objects inside video stream (object, face, ...) and auto-tag them using OpenCV library and classify the topic video relates to.

- Project Title & Team # & Members

  Object Tracking, Auto-Tagging and Activity Recognition in Real-time video
  – Pooja Shekhar

- Project Goal and Objectives
  - Motivation

    Video activity analysis is well established in the fields of security surveillance and military applications. But labor intensive security is expensive and ineffective because 'err is human'. For monitoring the activities automatically, we need to recognize the objects in the video feed and track their activity which will help us disseminate relevant information.
  - System Features & Objectives

    Details of it includes: -
    - extract feature corresponding to a given metadata
    - tracking these features across video frames
    - learning from these features (clustering, classification, ...)
    -tagging the learnt faces.

- Related Work

  http://autoscout.adsc.illinois.edu/applications/autoscout/

- Projects done by others (include the URLs in Bibliography)
  - http://autoscout.adsc.illinois.edu/applications/autoscout/
  - http://sparkbigdata.com/tutorials/104-case-studies
  - https://books.google.com/books?id=TI3T9Yo7xkEC&pg=PA309&lpg=PA309&dq=video+analytics+motivation&source=bl&ots=aJMX5sqrQr&sig=iEty0gVZe4JRtM3oL00dWXQyyFc&hl=en&sa=X&ved=0ahUKEwiSi-S7qPnOAhVGbiYKHebwAMoQ6AEIQTAJ#v=onepage&q=video%20analytics%20motivation&f=false