

Lab 5

If you think your tracker is finished, you can think about how to evaluate the performance of your tracker. Further, you can think about the strong and weak parts of your tracker, and propose possible improvements. If there is enough time, you can implement one or more of your proposed improvements and analyze the effect compared to the original tracker.

The final project of this lab is a mean-shift tracker, together with a scientific paper describing what you did (and didn't/future work) do and why (not) and why it does work (or not). You should include testing results on part of the soccer data and a video from another domain. You can get the other video from the internet, your video camera or your camera phone. Expect the tracker to perform differently on video's from different domains, according to the amount of time you have left you can tune the tracker or just describe the difficulties in your report.

Also try to analyze the performance of different color spaces. What are the advantages and disadvantages of certain color spaces, when do you think you should use one color space instead of the other, etc. After that, you can think about improvements of the tracker. This involves a thorough analysis of your current version, including an analysis of the strong and weak points. If you know when your tracker goes wrong, you can think of possible solutions to overcome these difficulties.

However, first think about how to evaluate the performance of your tracker. It would be nice to show some quantitative results in your report, instead of pointing at the videos and stating "Look, it works!". Several options exist, some more time-consuming than others.