Computer Vision, Spring 2024

Final Project Guidelines

Some of you approached me w.r.t. the organization of the final project. Here a few guidelines:

- group project for about 3-4 students
- groups are in principle free to choose any type of driving application to solve a specific image analysis task on images or video-sequences
- NO deep learning project as this is not the topic of this class
- project needs to include some major categories of methods discussed in class, covering e.g. filtering, segmentation, object detection and characterization, snakes, GHT, etc. / expectations are that the project goes significantly beyond the effort for the three class projects
- deliverables include: comprehensive final report with code and results & short presentation to the class
- timeline: after spring break, we will start a) with forming groups, b) working on a draft proposal, c) discuss project with GG, etc.

Typical projects in past classes included the following themes:

- segmentation based on generalized HT
- vanishing point detection for road navigation (line HT for car driving)
- car license plate detector
- identifying playing cards (for cheat detection)
- Sudoku solver
- estimate basketball motion from video sequence
- interpretation of music scoresheet to generate music
- ball path prediction
- filters mapped on face images
- cursor movement using gesture recognision
- ....