

Digital Video Processing (EE392J)
Department of Electrical Engineering
Stanford University

Project Report and Presentation

Issued: March 5, 2007

Office hours: Mon and Wed after class, and Fri from 2:00-3:00.

Project presentations: Wednesday, March 14, during extended final class from 4:15-6:00.

Project report due: Friday, March 16, at 5:00 PM.

Project Presentations: Wed (3/14) during extended last class

Each project team will give a brief oral presentation describing their project. The presentations should describe the goal of the project, problems that were addressed, the algorithms used, and the experimental results. You should give sufficient information so that your classmates can understand your approach, however they will also have access to your project report to learn about the details. The length of the presentation should be:

Individual project presentations: 15 minutes + 3 mins questions (about 7-9 slides, plus video)

Two-person project presentations: 22 minutes + 5 mins questions (about 10-15 slides, plus video)

After each project presentation there will be a few minutes for questions. Please be careful to plan your presentation for the time allotted. A one-person project should have no more than about 9 slides, and a two-person project should have no more than about 15 slides.

If possible, each project should have a short video to demonstrate your work to your classmates. Often a video with *careful commentary* can convey more information than many powerpoint slides. Please give me an electronic copy of your presentation and video demonstration. Please compress your video with a standard codec (e.g., MPEG-1 or Motion-JPEG) to both limit its size and be playable on a variety of clients. For instance, confirm that your video can be played on Windows Media Player.

The project presentations will be given during an extended last class: **Wednesday, March 14, 4:15-6:00**. We will have a slightly longer last class to ensure that everyone has sufficient time to present their final project to their classmates and to answer questions. Please plan to attend until 6:00. If you need to leave at the regular class ending time of 5:30 please let me know so that we can plan your presentation earlier in the class period.

(See back)

Project Report: Due Friday 3/16 (5 PM).

The project report should contain two parts: (1) the actual project report, and (2) a copy of any code that you wrote as part of your project, as well as brief comments describing your code. The project report should include an abstract, a problem statement, brief motivation for the problem, discussion of the specific subproblems that were addressed, detailed discussion of your proposed algorithm(s), experimental results, conclusions, and references. In addition, you should provide some comparison versus other approaches to solve the same problem where the comparison may be experimental or simply a discussion.

The report should be written for a reader who has taken EE392J. For example, you do not have to explain block-matching motion estimation. However, if you use block-matching you should describe what type of block-matching you used, e.g., describe the blocksize, search strategy, and matching criterion. Provide sufficient detail so that a knowledgeable reader (an EE392J classmate) has sufficient information to implement your algorithm or understand your code. The text length of the report should be approximately equivalent to that of a conference paper – concise and informative. The total length should be approximately 10 pages, single column, including figures, images, and references. Each student should submit their own report, however project partners can share some appropriate background material. The individual contributions of each member in a multi-person project should be clearly identified.

Please give me an **electronic copy** of your report either in class or by email by 5 PM on Friday, 3/16. Your report will be placed on a webpage off of the course webpage. However any code you have written for your project should not be placed on the webpage, therefore please submit your code separately from your report, e.g., a ZIP file of your Matlab code with comments. Please submit your project report in PDF if possible, however postscript or Word formats are also acceptable (I'll convert them to PDF).

Summary of Things to Submit (by Friday, 3/16, at 5:00 PM):

1. Electronic copy of your written report
2. ZIP file of your code for your project, including brief comments
3. Electronic copy of your presentation
4. Files in your video demonstration (if appropriate)

Possible Use of Laptop for Presentation

If you do not have access to a laptop for your presentation, and you would like to use a laptop, please talk with your classmates or let me know. Note that you do NOT need to use a laptop for your presentation – transparencies would be fine. However, it would be nice to show a video demonstration as part of your presentation, and then you should place the video on a laptop prior to your presentation.