

## Details for Final Projects

### Expectations

For undergraduates (3 credit), it is sufficient to implement a paper of your choice, or to make some larger extensions to one of the projects from class. I expect the project to take about 20 hours per person, including the time spent coming up with a topic and understanding the material. Of course, the project may take more time or less, depending on your ambitions.

For graduates (4 credit), I expect a little more. For example, you could apply ideas from class to your own research. You could compare two different approaches. You could invent your own extensions to a paper or a project from class.

I encourage everyone to work in groups of 2-4, but you can also do a project by yourself if you are not using the class to satisfy the team project requirement. Group projects should have subcomponents for which individual members have primary responsibility. It's ok to mix graduate and undergraduate students.

### Project Ideas

I encourage you to try something that you are particularly interested in. For example, we didn't get to do a project on 3D reconstruction, so that might be fun. Or you could do a project on seam carving, or make a program that takes a folder of photos as input and outputs a set of panoramas (automatically figuring out which to stitch). Or you could make your own image-editing program, allowing someone to easily cut out regions and fill in the background. The possibilities are endless – don't limit yourself to these ideas. I don't want everyone to do the same thing, so I might group people together with similar proposals or ask that you do something else. Whatever you do, give yourself plenty of time. *If you want to incorporate code or resources from outside, just make sure it is very clear what you wrote and what is external. Do not copy outside code as a last resort to getting your project turned in on time.*

### Deadlines

**Mon Nov 18:** Choose your topic and submit a short summary on compass (~50 words). Specify your group members and what their individual contributions will be. Only one person within each group needs to submit the proposal.

**Dec 15, 11:59pm:** write-up

- Submit on compass
- Can be in html (provide link, use "project" instead of "hw1" in the standard address) or pdf
- Similar to other projects, but with more detail on how to do it
- *Include a section that lists any outside resources (either ideas or code/libraries)*

**Dec 16, 8:00am-11:00am:** Siebel Atrium (pending reservation request)

- Will be posters
- Include a basic summary of how to do it, any challenges or difficulties, and some successes and failures

### Grading

- Topic proposal: 10 pts if on-time and complete (reflected in project grade, not individual item)
- Implementation, generation of results: up to 70
  - An easy project may be worth 50; a moderate difficulty (on par with projects 3-5) up to 60; a difficult project (e.g., implement image analogies) up to 70
  - You could get up to 40 (of 70) for partial success (no final results working), or up to 60 if you come to me for help and work hard but still don't get final results
- Project web page: 10
  - Based on clarity and completeness and extent of results
- Class presentation: 10
  - Based on clarity