Project Milestone Expectations and Formatting

EECS 542: Advanced Topics in Computer Vision
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**Formatting:** Please write up everything in CVPR format so that all projects are consistent. There are templates for both \LaTeX and word. If you would like to avoid setting up a \LaTeX environment on your computer, try using overleaf.com. Ideally the documents build on each other.

**Goals and Expectations:** You will complete a project over the course of the semester in groups of 3-5. An ideal project is equivalent to work publishable in a venue like CVPR. While getting a paper accepted here is not the point (nor the expectation), this gives an idea of the level of ambition, thoughtfulness, and general excellence in execution that is expected for full credit.

1. **Project Proposal**

   Please write up a short document pitching the idea. You should have about two pages of text, plus at least one figure that communicates the idea. See the following page for rough format.

   In addition to enumerating the members of the team, the document should address the following questions (a subset of DARPA’s Heilmeier Catechism):

   - What are you trying to do? Articulate your objectives using absolutely no jargon. *(What are you really trying to do? Tell me a story!)*
   - How is it done today, and what are the limits of current practice? *(Why is this an open issue?)*
   - What is new in your approach and why do you think it will be successful? *(What is the specific novelty that you think you’ll address and what’s the insight you want to explore. Why do you have a hope of succeeding?)*
   - How long will it take? *(Is this feasible?)*
   - What are the mid-term and final “exams” to check for success? *(How will you know/quantify if you have succeeded? Will you get advanced warning?)*

   Your proposal should not address these questions one by one should but instead tell a narrative.

You will first do this with a paper that you have read, and then with the project you plan to do.

2. **Project Preliminary Report**

   Please write up an at least 4 page (but fewer than 6 page) short paper describing: the converged project; what concrete progress has been made; and what is left. Your goal is to convince the reader that you have made progress and you have a sense of how to complete the project.

   The precise formatting is up to you, but you should think of this as a short version of the long paper. Thus, it would make sense to have an introduction, related work section, method section, and experiments. Experiments may be incomplete, but need to have clear to-dos, planned experiments and explanations for why these test the right things rather than generic “test if it works” goals.

3. **Project Final Report**

   Please write up a 6-8 page paper consisting of usual sections of a CVPR or RSS paper. This should be written well and have good figures.

4. **Project Final Presentation**

   Details TBD depending on number of projects, but this will be a short presentation on the paper.
Figure 1: General Format for Proposal

Figure 2: In more detail