

## Report 7: Final Report

**Due:** End of Week 11

**Purpose:** Integrate your work, sharing the knowledge with a broader audience

### Overview

Your literature review should have exposed you to the common format of a computer science publication (i.e., introduction, related work, detail, evaluation, conclusion), which you will now deploy yourself. Combine your work and the materials in your prior into a single unified document that describes:

- the task, algorithm(s), and environment studied;
- the state of existing knowledge about the problem, algorithm(s) and its behavior;
- the research question and specific hypotheses examined;
- the experimental design(s) employed;
- the experimental results obtained;
- a discussion of your results; and
- your final conclusions.

Your paper should have a coherent narrative throughout; do not just paste prior reports together. Think carefully about what you have learned as a result of your research and let that inform the story you tell your reader now. Conversely, too much of science is reported as though it appeared *ex nihilo*, without something of the discovery process; enrich your reader's understanding with some guiding thoughts as well.

Be sure to incorporate comments and feedback from earlier reports.

You should write for an audience generally educated about computer vision; your report may be permanently archived in Digital Grinnell.

### Details

Papers submitted for publication must conform to certain publisher's guidelines. Fortunately, such conformance is often easy to obtain by using a *L<sup>A</sup>T<sub>E</sub>X* style provided by the publisher. While your view of the document within *L<sub>A</sub>T<sub>E</sub>X* will largely look the same, the generated output may be radically different.

Your document should use the `IEEEtran` document class with the class options `10pt,compsoc,journal,twoside` (i.e., for Computer Society journal article, with headings varying on facing pages). In *LyX*, you do this under *Document > Settings* by selecting the appropriate document class and custom class options in the “Document Class” section.

Your paper should be at least 5 pages.

Graphs, diagrams, and tables should be used where appropriate. All figures **must** be accompanied by source code (i.e., a MATLAB `.m` file) that generates the graphics. Where these figures are derived from experimental data, the data repository dependency mechanism (i.e., `DEPS` files) should be used to relate the code generating the figure to the data it contains in a completely traceable, reproducible manner. Tables derived from experimental data **must** be accompanied by an inline comment in the document source (*LyX* file) giving the name of the collection from which the numbers are derived.

Complete bibliographic references should be provided in a standard form at the back of the document with *BibTeX*.

If needed, appendices with more detailed background, derivations, or results may be added after the references.

You should produce single, collaboratively-generated report for each team.

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