

## **Final Project Guidelines**

### **Overview**

This handout presents some general guidelines for what is expected in the final write-up for the class project. You should address the issues presented here, but be aware that you should include other relevant information in your write-up as well. These guidelines should serve as a starting point to give you a feel for the most important subset of things that will be graded.

The final report should be approximately 10 pages. It is important to describe your work in a clear, concise manner. If the report is unnecessarily lengthy, points will be deducted. Similarly, the final presentation should be about 20 minutes plus discussion. Again, it is important to present your work in a clear, concise manner. Your presentation should give a clear story. Be sure to present the motivation, hypothesis, solution, and results, but focus on bringing out the most interesting and important points, rather than simply telling everything that you have done in a book-report type fashion.

### **Presentation**

The final presentation should convey the concept and hypothesis, briefly explain the solution and its architecture, briefly present the experimental findings and interpret these findings. The presentation should also answer questions such as:

- Was the hypothesis valid?
- Was the hypothesis only partially valid?
- What is your conclusion and/or new hypothesis?
- What should we all take away from your work? (i.e. what did you learn? what should we learn? why should we be interested in your work?)

### **Write-up**

There are roughly five major sections of importance that need to be discussed: the motivation and hypothesis, the architecture of your solution, your experimental methodology, your experimental analysis, and your conclusions.

#### **Motivation and hypothesis:**

What is your concept? Why is this an interesting topic? What motivates looking into it? What was your hypothesis? How much room for improvement is available? Are there certain application types for which this is more or less relevant?

**Architecture:**

Describe and explain all relevant aspects of your proposed architecture. Include a table of parameters supplied to your simulator for your baseline (include the values of everything, even if you used the defaults).

**Experimental methodology:**

How did you go about evaluating your hypothesis? What experiments did you run (clearly identify parameters that were varied from the baseline)? Why? What were they designed to show? What applications did you use to evaluate your hypothesis?

**Experimental analysis:**

What do the results of your experiments mean? Include relevant graphs and tables. Spurious data should not be reported. Only data that is useful and interesting.

Do your experimental results support or refute your hypothesis? Why?

Is further experimentation required? Why? What additional experiments would you run if you had more time? Were the set of applications you chose appropriate? Would your results extend to other types of applications? Is it possible to tell?

Is the improvement worth the cost of your proposed solution?

**Conclusions:**

Was your hypothesis correct? If not, what is your new modified hypothesis?

Why are your results interesting? What should we learn from them? Should people continue to look into this topic (i.e. what is the future work, if any)?