

CS 374 Assignment #12 Applications

Due the week of December 5, 2005

—

This semester you have had the opportunity to learn about various aspects of machine learning – fundamental algorithms, theoretical foundations, evaluation methodology, etc. While you have considered empirical evaluations of machine learning algorithms on real-world data sets, you have not yet had the opportunity to explore applications of machine learning in any depth. This week you will select a real problem to which machine learning has been successfully applied. Your job, then, will be to give a presentation on this application of machine learning.

1 Selecting an application

There are many sources of information on machine learning applications. These include (but are certainly not limited to) the following:

- Special Issue on Applications and the Knowledge Discovery Process, *Machine Learning* 30 (2/3), 1998.
- Special Issue on Applications of Data Mining to Electronic Commerce, *Data Mining and Knowledge Discovery* 5, (1/2), 2001.
- Handbook of Data Mining and Knowledge Discovery, Oxford University Press.
- Various issues of *IEEE Intelligent Systems*.
- Various issues of the journal *Data Mining and Knowledge Discovery*.

I have all of the above in my office, if you can't find them in our library or online.

In addition to considering the sources above, you might find it useful to do a search in Schow. Jodi Psoter is the librarian who serves as our department's library liaison. She will be happy to assist you in doing a search for relevant material.

2 The presentation

Your presentation should be 10-15 minutes long. Ideally, you should aim for 10-12 minutes, leaving a little bit of time for questions. You may use PowerPoint slides, transparencies, a blackboard, or any other audiovisual source. The most important thing, however, is that your presentation be well-prepared and practiced.

If you would like to work with a classmate, you may. However, each of you should plan to present for 10-15 minutes, just as you would have if doing the presentation individually.