

term project. multi-agent systems – fall2008 – prof sklar

The term project can be one of the following:

- A. a research report following up on one of the papers that we read and discussed in class, or
- B. a research report on a particular area of real-world applications of agent-based or multi-agent systems that are in use today, or
- C. an applied report in which you build some software to expand on someone's work that we discussed in class.

The term project has three parts:

1. abstract (due Nov 4)
2. oral presentation (in class on Dec 3 or Dec 10)
3. written report (due Dec 10)

abstract

The abstract is due by midnight on **Nov 4**, submitted to Prof Sklar by email. The abstract should be a one-paragraph description of your project, 200 words or less. PDF format is preferred. The abstract should identify which type of project you are planning to do (A, B, or C, as above), and which paper or application or piece of work you are planning to research.

oral presentation

The oral presentation will be given in class on one of the following dates: Dec 3 or Dec 10. The presentation should last approximately 20–30 minutes and should include slides and any other kind of audio/visual media that will help convey your project to the class. If you've chosen project type C, a software demonstration would be appropriate.

written report

The written report is due on the last day of class, **December 10**. Please bring a hardcopy to class and also email a softcopy to Prof Sklar. PDF format is preferred.

The written report should be written and formatted like a conference paper. Use the AAMAS 2009 conference paper format, which can be found here:

<http://www.conferences.hu/AAMAS2009/submission.html>

Look under the section entitled “PAPER FORMATS” for templates for LaTeX2e, Word and other word processing software. Follow the instructions for “regular papers” (not extended abstracts) except you should ignore the instructions for making your paper ready for “blind review”; i.e., please put your name on it!

Your paper should be a maximum of 8 pages in length, and a minimum of 4 pages (two columns). *Your paper should be written in good English, with careful attention paid to spelling, grammar and punctuation.*

Your paper should include the following sections:

- *Abstract* —

Include the abstract you wrote (above) and submitted on Nov 4. It is okay to modify the original version if you have changed some aspects of your project (although if you made significant changes, you might want to run them past me in email or after class before you get to the stage of writing up the report...). The abstract should describe what you actually did, not what you thought you were going to do at the beginning of November (just in case that changed...)

- *Introduction* —

This part should contain a more detailed description of your project and what is contained in your report. Remember, your report should be written as if it were a conference paper. You have read many of these this term, so you should have some idea of what a conference paper looks like. The introduction to a conference paper can be quite pedantic. It can say things like: This is the research (or application) area that my paper discusses. This is the work upon which my experiments expand. This is the contribution that my work makes to the (sub-)field of X. This paper is organized as follows... The introduction should be a guide to the paper that can be easily understood by someone who has taken a basic course in multi-agent systems (i.e., someone who has read the Wooldridge book, but not necessarily all the additional papers we read in class). The language should be clear and concise. Conference papers are typically reviewed by busy professors who have to review a pile of papers in a short amount of time. Don't be flowery or cryptic. Say what you mean and mean what you say.

- *Content* —

This part will vary depending on which type of project you chose:

- If you chose project type A, then provide a detailed discussion of the paper that you chose, why you chose it, what you expected or hoped to find when you decided to follow up the work in that paper, and what you actually found. Were you disappointed? Why? Were you surprised? Why? Is the follow-up work by the original author(s)? If not, is there any relation with the original author(s) (i.e., thesis advisor)? Is the follow-up work current (i.e., last three years)? If not, can you find anything that is current?
- If you chose project type B, then provide a detailed accounting of the area you chose and the applications you discovered. How are the applications being used today? Where were they developed? What agent-based and/or multi-agent theories are being used? Were any new agent-based and/or multi-agent theories developed for the applications you discuss?
- If you chose project type C, then provide a detailed explanation of the work you chose to expand. Why did you choose to expand on it? Was there something about the original work that you felt was wrong or poorly done or incomplete? What do you think you can contribute by expanding the work? Be sure to include the technical details of the software you wrote (i.e., language specifications, any data requirements, etc). Include screen shots if appropriate. Include experimental results and compare your results to those of the original work.

- *Summary* —

What is the take-away message that you want your reader to remember from your project? If there are any discussion points that you have not mentioned anywhere else, then elaborate on them here. What *future work* might you suggest?

- *References* —

Don't forget to include a bibliography! You should have at least 5 sources. You can include the Wooldridge textbook as one of them. Include bibliographic information for anything you cite, either directly or indirectly. We don't want no plagiarism here!

grading

The term project is worth 40 points, or 40% of your term grade.

- The **abstract** is worth 5 points (out of 40).
- The **oral presentation** is worth 5 points (out of 40).
- The **written report** is worth 30 points (out of 40). This is the most important part because this is where you really explain about the work you did.