

Projects in MFAI (67686)

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You should do a project as an alternative to doing a scribe if and only if you are not listed as a scribe in the course website. The idea is that the project should be completely equivalent to a scribe. Therefore, the projects can be carried out in triplets, and must be submitted in LaTeX. The submission deadline is 18.7.08.

You are to summarize one paper out of the papers that are listed below. I am aware that ultimately your summary will look very much like parts of the paper, and that is OK. However, your goal is to give me the impression that you understood the paper. I chose papers that complement nicely the material given in class.

The papers only deal with the first three subjects of the course, namely robotic search and coverage, constraint satisfaction, and voting. Voting will only be addressed in the lectures of 18.7 and 25.7, so those who are interested in this subject (the third paper) are advised to wait until 25.7 before they start the project.

Here are the papers (the name of each paper is a link to the article itself):

1. [Min-Max Tree Covers of Graphs](#): This paper presents the 4-approximation algorithm that we used as a black box in Lecture 2. It's a fascinating paper, not very long but not very easy either.
2. [From Local to Global Consistency](#): I gave one result from this paper in the first hour of Lecture 4. It's a rather long paper, but technically quite easy.
3. [When are Elections with Few Candidates Hard to Manipulate](#): This paper is long but very well-written and technically easy. In Lectures 6 and 7 we will talk about the problem of manipulation by a single manipulator; this paper talks about a related problem, that of manipulation by a coalition.

Please send me an email if you have any questions. Good luck!