Experiments with Genetic Algorithms Honours Module
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Course site: http://people.cs.uct.ac.za/~ambogho/GA

In this module, we will 1) look at current genetic algorithms research and 2) use existing tools to experiment with applications of genetic algorithms.

Course Activities

The first week I will give an overview of Genetic Algorithms and one or two application areas.

Student will be responsible for a paper presentation, a mini-project and a final exam. The course grade will be based on the exam (60%) and the mini-project report (40%). A mark of 50% and having presented a paper will constitute a pass.

1. Paper Presentations
Each student will do a presentation based on a research paper. If you want to present as part of a team, you may do so, but make sure the paper you choose has enough diversity to accommodate you all. A schedule is on the notice board for you to sign up for a presentation time slot. Please sign up by Thursday afternoon. A team will have at most 3 people.

A presentation will take up at least 10 minutes and can go up to 30 minutes depending on how many people are presenting that day.

Papers on which to base your presentation will be posted on the course website by end of day Tuesday, 31st July. You may present a paper that you find yourself, but it must be current, i.e. published within the past two years. In addition, I will need to have a copy so that I can post it for everyone else at least two days before your presentation.

2. Mini-Project.
You can download a GA tool and experiment with it. You can do an experiment similar to one described in a paper presented. Write a brief report (2 to 4 pages) on your findings from the experiment due on the last day (Friday 24th August 2007).

3. Final Exam
There will be a 2-hour exam to be written during the exam period. Questions will come from the research papers presented as well as the introductory lectures given during the first week– so do come to class and do pay attention.