

## CS 335-31 - Artificial Intelligence Research Project I

Objective: To develop a Rule-based Expert System for a particular domain.

Description: A project will consist of an extended abstract (4 to 10 pages) covering the following aspects of your Rule-based ES:

- Selected Domain - Area of Expertise
- Proposal for the System
- Rule-based Knowledge Base
- Database of Facts
- Test Bed

Format: Each project should include

- An introduction to the domain. Preferably a 'white paper' being the main source for your knowledge base
- A paragraph or two explaining the need for the ES and the benefits the system will bring
- Detail description of the Knowledge Base (minimum 65 rules, desirable 130 rules)
- Data Base of information/examples
- Description of the test bed and results. Test bed should include:
  - Results over full tests
  - Results over test where part of the facts where missing
  - Percentages of accuracy for each set
- A PowerPoint or Web presentation of the system.
- (optional) A running application version of the system.

Due Date: Projects will be due on Tuesday, October 19th. A short presentation of the projects will be given on that date. Proposals for the domain will be due on Tuesday, September 21st, in class. Each proposal should enumerate the group composition and the topic selected.