

## Faculty of Computer Science 2003-2004 Seminar Series

## Scheduling Patient Tests Using JACK Intelligent Agents

By

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## \*\*Refreshments will be served at 3:30 p.m.\*\*

A hospital is a complex, dynamic and uncertain environment, which is composed of many interacting departments and units. The effective cooperation of these departments and units is very critical to the quality of their medical service. Scheduling of patient examination is a complicated task for hospitals because it needs the involvement of patients, hospital departments and medical units, such physicians and nurses. At the current stage, the scheduling of patient examinations in hospitals has not been well managed, since it is quite common that patients take a long time waiting for examination tests while hospital laboratory equipments stay idle.

In the report, we presented a multi-agent system using JACK for scheduling patient tests automatically in hospital laboratories. This system was tested with some artificial data, which were attained by simulating some simple scenarios of the laboratory scheduling in hospital. With the system, we expect to automate the patients test scheduling so as to minimize the waiting time of patients and maximize the throughput of the laboratory facilities of hospital.