# CS Masters' Thesis Defense

**Title:** *Deadlock Detection and Recovery in Linux*
**Speaker:** Vinita Kondhalkar
**Date:** Thursday, September 15, 2011
**Time:** 1:00 p.m.
**Location:** GMCS 405
**Thesis advisor:** Dr Joseph Lewis

**Abstract:**
This thesis focuses on the problems faced by concurrent processes. Deadlock is a potential problem in all multiprogramming environment and can occur wherever multiple processes interact. A set of processes is deadlocked if each process is waiting for an event that only another process in the set can cause. Timely detection of deadlock and its cause is essential for resolving the error and maintaining forward progress. This research aims at creating a framework which can be used by a developer for detecting the occurrence of deadlock. It also helps the developer in analyzing the cause of deadlock. The developer can also view the log files which provide assistance to study the sequence of events such as locking, unlocking of the resources using semaphores and pthread functionalities.