CIS 525 Software Development of Parallel and Distributed Systems   Fall 2008

Lecture 22, November 18, 2008

1. **Generalized Stochastic Petri nets (GSPN) vs. Markov chains:**
   a) Definition of GSPN
   b) Markov chain as reachability graph of GSPN
   c) Example of system modeling with GSPNs
   d) computing Markov chain from GSPNs.

Lecture 23, November 20, 2008

2. **Combining Object-Orientedness with Petri nets (pp. 146-157):**

   a) CoOperative Objects – the structure; Object Control Structure - OBCS
   b) Examples of COO objects - class File, class File Handler; dining philosophers
   c) Petri nets inside objects – Petri nets represent internal concurrency of objects
   d) Objects inside Petri nets – Petri nets serve as coordination tool of objects' activities
   e) Integration of Object-Orientedness and Petri nets – two levels of refinement
   f) Dealing with issues of inheritance anomaly.