Faculty of Computer Science 2003-2004 Seminar Series

Qualitative Model Abstraction and Debugging for Model-based Diagnosis By Yuhong YAN NRC-IIT

Wednesday, December 3rd, 2003 3:30 - 4:30pm ITC317

Refreshments will be served at 3:20 p.m. Model-based diagnosis (MBD) is matured to challenge real-world applications. Building symbolic qualitative models for systems is a crucial task and the starting point of diagnostic tasks. This seminar introduces the state of the art of MBD based on symbolic qualitative models and my recent work in this domain. The model abstraction problem is about how to build qualitative models for complex engineering systems. Starting from simulation model, we have solutions for both static and dynamic systems, with or without known landmarks. The model debugging problem is to verify the validation of the produced qualitative model. My current work involves designing a model debugger which can verify the results from diagnosis engines.