

Special Topics Course Announcement Winter 2015

EECS 598 (Section 1) CONTROL OF DISCRETE EVENT SYSTEMS

Instructor: Stéphane Lafortune
Room 4415 EECS
stephane@umich.edu

Time: Tuesday-Thursday: 1:30 – 3:00 pm, room 1005 Dow

Prerequisite: EECS 566 *or* EECS 598-05 in Fall 2013 *or* permission of instructor

Description:

Advanced topics on control of discrete event systems, with focus on the following topics: distributed and decentralized control architectures; synthesis methodologies for controllers under safety and liveness properties; comparison of synthesis techniques for specifications described by automata and by temporal logics; joint control and diagnosis problems for fault-tolerant control; discussion of relevant case studies. Other topics may be explored, based on students' interests.

The course will combine lectures on the above topics with discussion of representative papers in the literature led by the students. In addition, the students will choose a topic for a term paper to be presented and discussed in class.

Grading will be based on class participation and on the term paper.

