

# ECE 6444: Hybrid Control Systems

Spring 2003, 3 credits, CRN: 16271

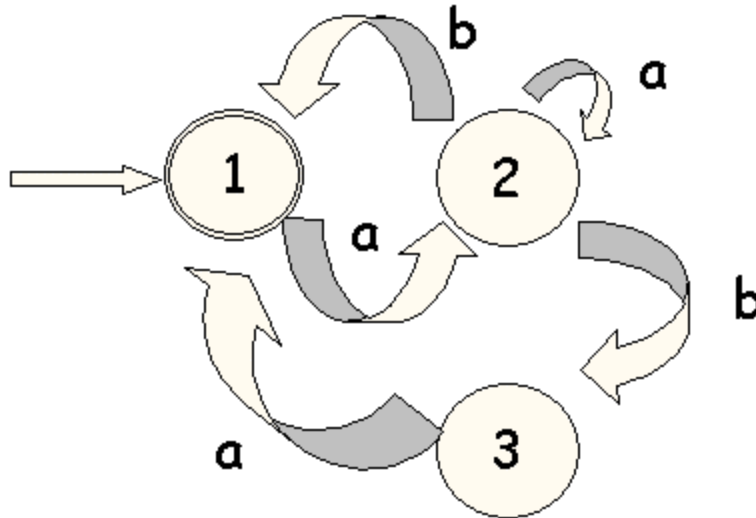
HW#1

Due Date: Feb 11<sup>th</sup>, 2003

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**Problem#1:** Convert the following non-deterministic automata to deterministic automata. Describe the language accepted by this automata. (20 points)



**Problem#2:** Describe and write down the hybrid automata models for systems of sections 2.2.6 to 2.2.15 in the textbook. (50 points)

**Problem#3:** Describe a system different from the ones covered in the class or the textbook, that you might have encountered in your research, that can be modeled as a hybrid system. Give the hybrid automata model of the system. (10 points)