Systems and Information Division
Technical Committee on Discrete Event Systems

Toward a New Framework for Dependable Systems

Goal

Theory for analysis, design and control of the Discrete Event Systems (DES) and Hybrid systems are developed. Furthermore, some developed ideas are exploited for design of the dependable systems.

Problem

An approach with DES model is promising one that is expected to play an important role in developing the dependable complex systems.

Strategy

Communication system, automation, transportation system, man-machine system and embedded system are addressed from viewpoint of DES. Some important problems related with these systems are solved.
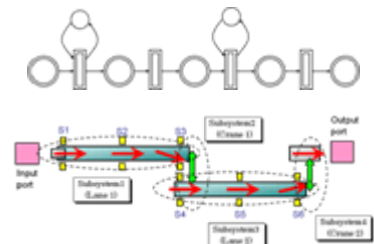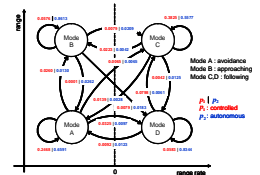
Activity Plan

Organizing annual workshops (twice/year), proposal for organized session in the SICE Annual Conference and SSI are our main activities.

Overview

Modeling and Analysis for DES, Hybrid Systems

Design, Planning, and Control

Evaluation, Diagnosis, and Verification

Keywords

Methodology: modeling, supervisory control, scheduling, diagnosis, verification, decentralized system

Application: communication system, automation, transportation system, man-machine system, embedded system

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