Graduate School of Engineering, Division of Electrical, Electronic and Information Engineering Intelligent System Area (Takai Laboratory)

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Laboratory Information

Most existing systems consist of several components that operate concurrently. Such systems are called concurrent systems. For systems whose main components are computers, it is necessary to analyze and control their discrete behavior. We are interested in developing efficient techniques for verification, control, and optimization of concurrent systems using mathematical models.

Our recent research topics include
* Analysis and Control of Concurrent Systems Based on Automata and Petri Nets,
* Control and Scheduling of Vehicles,
* Modeling and Verification of Distributed Software, and so on.

Examples

Mathematical models

Automata

Petri nets

Modeling

Concurrent Systems

Verification | Control | Optimization

Distributed Information System

Autonomous Distributed Control of AGVs