



Diplomanden- und Doktorandenseminar
des Instituts für Informatik

Model Checking with Logic Based Petri Nets

Dipl.-Inf. Tristan Marc Behrens

We introduce a class of Petri nets, simple logic Petri nets (SLPN), that are based on logical expressions. We show how this type of nets can be efficiently mapped into logic programs with negation: the corresponding answer sets describe interleaved executions of the underlying nets. The absence of an answer set indicates a deadlock situation. We also show how to correctly model and specify AgentSpeak agents and multi-agent systems with SLPN's. Both theorems allow us to solve the task of model checking AgentSpeak multi-agent systems by computing answer sets of the obtained logic program with any ASP system.

Dienstag, den 08.01.2008

14:40 Uhr in Raum 106, Julius-Albert-Straße 4