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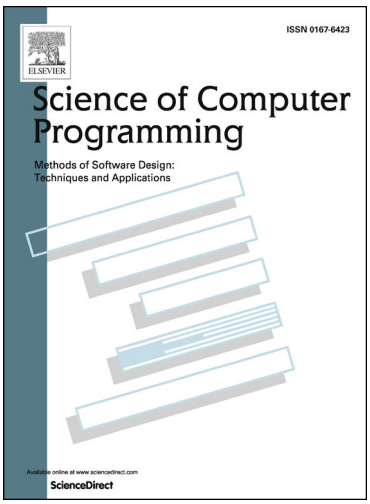

Stochastic Analysis of BPMN with Time in Rewriting Logic

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Highlights

- an executable specification in rewriting logic of a subset of BPMN;
- we handle inclusive splits, loops, and unbalanced gateways;
- we support stochastic specification of time and branching constructs;
- we provide automated verification of stochastic properties such as expected processing and synchronization time;
- we use statistical model checking;
- the approach has been validated on several real-world BPMN processes.

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