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Temporal assertions with parametrized propositions. (English) Zbl 1203.68103
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Summary: We extend our previous approach to run-time verification of a single finite path against a formula in next-free Linear-Time Logic (LTL) with free variables and quantification. We discuss the design space of quantification and introduce a binary operator that binds values based on the current state. The binding semantics of propositions containing quantified variables is a pure top-down evaluation. The alternating binding automaton corresponding to a formula is evaluated in a breadth-first manner, allowing us to detect refuted formulae during execution.

MSC:

[68Q60](#) Specification and verification (program logics, model checking, etc.)

Cited in **2** Documents

Keywords:

[run-time verification](#); [Linear-Time Logic](#); [alternating binding automaton](#)

Full Text: [DOI](#)