

Parameter synthesis for probabilistic real-time systems*

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Abstract

The parameter synthesis problem aims to find parameter valuations that guarantee that a given objective is satisfied for a parametric model. Applications range from automated model repair to optimisation. This lecture will focus on models with probability and real-time and give an overview of recent results concerning parameter synthesis from quantitative temporal logic objectives. Existing algorithmic approaches and experimental results will be discussed, and future research challenges outlined.

This lecture is based on [2, 1, 3].

1998 ACM Subject Classification D.2.4 Software/Program Verification

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