

Boroday, S., Petrenko, A. and R. Groz. "Can a Model Checker Generate Tests for Non-Deterministic Systems?" *Electronic Notes in Theoretical Computer Science*, 190 (2) August 2007 : 3-19.

Abstract

Modern software is increasingly concurrent, timed, distributed, and therefore, non-deterministic. While it is well known that tests can be generated as LTL or CTL model checker counterexamples, we argue that non-determinism creates difficulties that need to be resolved and propose test generation methods to overcome them. The proposed methods rely on fault modeling by mutation and use conventional (closed) and modular (open) model checkers.

Keywords : Testing; Software; Black Box; Test Generation; Verification; Model Checking; Module Checking.