

TESTING NON-DETERMINISTIC GENERALIZED MACHINES

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Abstract

The paper presents a method for generating test sets from non-deterministic generalised stream X-machines. These are generalisations of finite automata, that use processing relations to label state transitions instead of mere symbols. The testing method is proved to detect all faults of the implementation provided that the processing relations are implemented correctly and the system meets certain initial requirements, called "design for test conditions". An example illustrates the proposed method.

Keywords: completeness, design for test, finite state machine, generalised stream X-machine, nondeterminism, output-distinguishability, state cover, testing

AMS subject classification: 68Q60,68N30