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Unary self-verifying symmetric difference automata

Laurette Marais^{1,2} and Lynette van Zijl^{1(B)}

¹ Department of Computer Science, Stellenbosch University,
Stellenbosch, South Africa

lvzijl@sun.ac.za

² Meraka Institute, CSIR, Pretoria, South Africa

laurette.p@gmail.com

Abstract

We investigate self-verifying nondeterministic finite automata, in the case of unary symmetric difference nondeterministic finite automata (SV-XNFA). We show that there is a family of languages $L_n=2$ which can always be represented non-trivially by unary SV-XNFA. We also consider the descriptive complexity of unary SV-XNFA, giving an upper and lower bound for state complexity.