NEW ENCRYPTION SCHEMES USING RECURRENCE RELATION OF ORDER 2 AND FINITE STATE MACHINES

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Abstract

Automata theory is the study of abstract computing devices or machines. In computer science we find may examples of finite state system and the theory of finite state systems, as a useful design tool for these systems. A recurrence relation relates the nth element of a sequence to its predecessors. Recurrence relations are useful in certain counting problems like Fibonacci number. In the present paper, new cryptographic schemes are proposed using finite state machines and recurrence relations of order 2.

Keywords : Moore Machine, key, cryptography, recurrence relation of order 2.