

Lattices and Finite Machines

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Abstract

A finite machine is a sextuple $M = (E, I, O, fE, fO, eo)$ formed by three non-empty finite sets E (set of states, eo is the initial state), I (set of inputs), O (set of greetings), the transition function and the exit function. The finite machine concept is widely used in computational theories and artificial intelligence. In this work, we will prove the theorem that if M is a finite machine and $S(M)$ is the set of all submachines of M , it is verified that it is a bounded and distributive lattice.

Biography:

Jesus Castañeda Rivera is a math and educator. Professor principal in Center of investigation and Teaching of the Mathematics (CIEM). The Dr. Castañeda is laurate Mixbaal Prize (2009), UNID medal (2011) and Merit Award Prize of Morelia (2006).

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