

Novotný, Jiří

The category of Pawlak machines. (English) [Zbl 0574.68047](#)
Czech. Math. J. 32(107), 640-647 (1982).

The paper is concerned with the study of the category whose objects are Pawlak machines and where morphisms are simulations. Two problems are investigated: 1) necessary and sufficient conditions for the existence of simulations for given two machines; 2) the description of the studied category.

MSC:

[68Q70](#) Algebraic theory of languages and automata
[18B20](#) Categories of machines, automata

Cited in 1 Document

Keywords:

[simulations](#)

Full Text: [EuDML](#)

References:

- [1] Pawlak Z.: On the notion of a computer. Log. Math. Phil. of Sci. III, Amsterdam 1967, 255-267.
- [2] Bartol W.: Programy dynamiczne obliczeń. PWN Waszawa 1974.
- [3] Novotný M.: O jednom problému z teorie zobrazení. Spisy vyd. Přír. Fak. Univ. Masaryk Brno, No 344 (1953), 53-64.
- [4] Novotný M.: Über Abbildungen von Mengen. Pac. J. Math. 13 (1963), 1347-1359. · [Zbl 0137.25304](#) · [doi:10.2140/pjm.1963.13.1359](#)
- [5] Kopeček O.: Die arithmetischen Operationen für Kategorien. Scripta Fac. Sci. Nat. UJEP Brunensis, Math. 1, 1973, 23 - 36.
- [6] Kopeček O.: Construction of all machine homomorphisms. Bull. Acad. Polon. Sci., Sér. Sci. Math. Astr. Ph., 8 (1976), 655-658. · [Zbl 0367.94074](#)
- [7] Kopeček O.: Construction of all simulations of Pawlak machines.
- [8] Gavalec M., Jakubíková D.: O širine kategorii monounarnych algebr. Math. Slovaca, 28 (1978), 263-276.
- [9] Novotný M.: On some problems concerning Pawlak's machines. Math. Found. of Comp. Sci. 1975, Lecture Notes in Comp. Sci. 32, Proc. 4th Symp., Mariánské Lázně, Sept. 1 - 5, 1975. Editor J. Bečvář, 88-100. · [Zbl 0322.68031](#)
- [10] Novotný M.: On mappings of machines. Math. Found. of Comp. Sci. 1976, Lecture Notes in Comp. Sci. 95, Proc. 5th Symp., Gdańsk, Sept. 6- 10, 1976. Editor A. Mazurkiewicz, 105-114.
- [11] Kopeček O.: The categories of connected partial and complete unary algebras. Bull. Acad. Polon. Sci., Sér. Sci. Math. 27 (1979), 337-344. · [Zbl 0419.08005](#)
- [12] Novotný M.: Characterization of the category of connected machines. · [Zbl 0539.68048](#)

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.