Explorations of ternary cellular automata

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While binary nearest-neighbour cellar automata (CA) have been studied in detail and from many different angles, the same cannot be said about ternary (three-state) CA rules. We will present some results of the explorations of the vast space of ternary rules, paying special attention to selected classes of rules, such as those which exhibit conservations laws as well as rules which are "reducible" to binary rules. The underlying question will be as follows: are there any ternary rules which could be useful in "complexity engineering", for example, to construct solutions of problems similar to the density classification problem?