OPEN SYNCHRONOUS CELLULAR LEARNING AUTOMATA

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Abstract:

Cellular learning automata is a combination of learning automata and cellular auto-
superior to cellular learning automata because of its ability to learn and also is su-
learning automaton because it is a collection of learning automata which can inter-
applications such as image processing, a type of cellular learning automata in which
cell in the next stage of its evolution not only depends on the local environment (a
neighbors) but it also depends on the external environments. We call such a cellu-
as open cellular learning automata. In this paper, we introduce open cellular learn-
then study its steady state behavior. It is shown that for a class of rules called co-
open cellular learning automata in stationary external environments converges to a
compatible configuration. Then the application of this new model to image segment
presented.