

Restarting automata are linguistically motivated models for language representation. The main goal of this work is to propose a suitable version of restarting automaton for learning from positive and negative samples using genetic algorithms. We also characterize the class of languages accepted by limited context restarting automata with respect to the Chomsky hierarchy. The proposed learning algorithm is compared to two well-known methods for learning languages from positive and negative samples - RPNI and LARS. A tool for learning the restricted version of restarting automaton is developed as a part of this work. Examples of usage and user guide are included in this work.