

Restarting automata, in their most general form, represent a very strong theoretical model recognizing much wider class of languages than the class of context-free ones. Hence, our goal was to design a tool which for a given restarting automaton (in human-readable format) generates a program computing the meaning of an input text. In order to enable that, this thesis extends the model of restarting automata by adding semantics to its meta-instruction. The resulting program is a compiler-compiler (CCRA) inspired by the tools such as flex or bison. However, the CCRA uses restarting automaton instead of a context-free grammar. The implementation as well as the output are realized in C++ which ensures the compatibility with both Windows and Linux systems.