

RGA - One-Sided Random Context Grammars

Abstract

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This presentation examines the role of One-Sided Random Context Grammars (ORC), which are the special type of general Random Context Grammars used in theoretical informatics.

The presentation consists of three parts:

Firstly formally defining the types of these grammars and their special cases (e.g. Permitting ORC, Forbidding ORC, Propagating ORC), hence giving some examples to understand these types of grammars and to better explain how they work.

The second part presents what kinds of languages these grammars can describe. In addition to that, a comparison of the ORC grammars power to more familiar types of grammars, such as regular grammars or context-free grammars.

In the end, there is an explanation of why are these grammars so interesting and good to use and there will also be shown some properties of ORC grammars.