Watson-Crick Context-Free Grammars

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Abstract

In this presentation, we define Watson-Crick context-free grammars and its place at Watson-Crick grammars. A Watson-Crick context-free grammar is a 5-tuple. We say that the right-hand side of a rule has nonterminals with double-stranded terminal strings and generates terminals with complete double-stranded strings. The main goal of the presentation is to learn about Watson-Crick grammars.

At first, the presentation defines Watson-Crick grammars and more specifically the context-free variant. Then, we introduce their properties and its relation with other Watson-Crick grammars. Finally, we give a brief description of Watson-Crick automata and a comparison with Watson-Crick grammars.