Parsing Techniques - Selected Sections 9.9 through 9.14

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Abstract

The presentation is focused on the terms Left and Right context of a parsing decision. Explanation of the algorithms used to obtain these contexts is included. As shown further, this information can be exploited in a few ways. Discriminating Reverse parsing (DR(k)) uses the knowledge of the left context to reduce the size of the table significantly. LR-regular parsing, on the other hand, utilizes the right context to provide optimal parsing power. Finally, LAR(k) parsers provide an improved approach to LR-regular and cover a large class of unambiguous grammars. Key attributes of these techniques are described with a deeper insight into the advantages and usage of Discriminating Reverse parsing.