Record Nr. UNINA9910299944703321 Autore Gelbukh Alexander Titolo Automatic Syntactic Analysis Based on Selectional Preferences / / by Alexander Gelbukh, Hiram Calvo Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-74054-7 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (VIII, 165 p.) Collana Studies in Computational Intelligence, , 1860-9503;; 765 006.35 Disciplina Soggetti Computational intelligence Computational linguistics Natural language processing (Computer science) Artificial intelligence Computational Intelligence **Computational Linguistics** Natural Language Processing (NLP) Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- First approach: sentence analysis using rewriting rules Nota di contenuto -- Second approach: constituent grammars -- Third approach: dependency trees -- Evaluation of the dependency parser --Applications -- Prepositional phrase attachment disambiguation -- The unsupervised approach: grammar induction -- Multiple argument handling -- The need for full co-occurrence. Sommario/riassunto This book describes effective methods for automatically analyzing a sentence, based on the syntactic and semantic characteristics of the elements that form it. To tackle ambiguities, the authors use selectional preferences (SP), which measure how well two words fit together semantically in a sentence. Today, many disciplines require automatic text analysis based on the syntactic and semantic characteristics of language and as such several techniques for parsing sentences have been proposed. Which is better? In this book the authors begin with

simple heuristics before moving on to more complex methods that

identify nouns and verbs and then aggregate modifiers, and lastly discuss methods that can handle complex subordinate and relative clauses. During this process, several ambiguities arise. SP are commonly determined on the basis of the association between a pair of words. However, in many cases, SP depend on more words. For example, something (such as grass) may be edible, depending on who is eating it (a cow?). Moreover, things such as popcorn are usually eaten at the movies, and not in a restaurant. The authors deal with these phenomena from different points of view.