



METADATA

Title: Computational Linguistics

Other Titles: -

Language: Greek

ISBN: 978-960-603-492-3

Subject: HUMANITIES AND ARTS

Keywords: Computational Linguistics / Language Technology / Algorithms / Programming / Symbolic and statistical natural language processing

Bibliographic Reference: Tantos, A., Markantonatou, S., Anastassiadis Symeonidis, A., & Kyriakopoulou, P. (2015). Computational Linguistics [Undergraduate textbook]. Kallipos, Open Academic Editions. <http://dx.doi.org/10.57713/kallipos-793>

Abstract

The book describes the basic principles, methods, and tools of Computational Linguistics (CL). The book is interdisciplinary in nature and is of interest to undergraduate and graduate students in linguistics departments and computer science and/or polytechnic departments. Given the nature of the book, its subject matter is divided into two main areas. The first area aims to familiarize readers with and consolidate theoretical concepts and principles of linguistics at various levels of linguistic analysis. The second axis relates to the connection between the findings of theoretical linguistics and the practical applications of Language Technology (LT). These two axes are intertwined throughout the book. The

first chapter provides an overview of the subject of LT and its connection with both theoretical linguistics and computer science and LT applications, establishing a common basis of interest for the two different types of readers, philologists-linguists and computer scientists. The second chapter is devoted to the concepts of discrete mathematics, the understanding of which is essential in all sub-fields of CL and constitutes the core of its interdisciplinarity. Chapters 3-6 present the theory and applications of CL at the lexical, syntactic, and textual levels of analysis, using examples from existing tools for Greek. The last chapter is devoted to the directions and challenges of CL in the coming years.

