

Bibliographic Reference: Panagiotakopoulos, C., Tsalidis, C., Gakis, P., & Kokkinos, T. (2022). Computational Linguistics [Undergraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-127

Abstract

In the textbook entitled "Computational Linguistics", a systematic effort is made to analyze the natural language in detail at the level of morphology, syntax and grammar by automatic systems. Specific rules for natural language modeling are proposed, both with linguistic criteria (natural processing language) and with statistical elements (machine learning). At the same time, this description is integrated and expanded with teaching suggestions. The content of the textbook also, covers the field of computational linguistics of probabilities, statistical models (n-grams, word vectors), fields that are fundamental tools of natural language processing (NLP) to support applications such as information management and database searching, and the inclusion of these applications in teaching scenarios. This textbook is the result of collaboration between researchers from the field of IT, linguistics and pedagogy.







The Project is funded by the National Development Programme 2021-2025 of the Ministry of Education and Religious Affairs and implemented by the Special Account for Research Funds of the National Technical University of Athens.