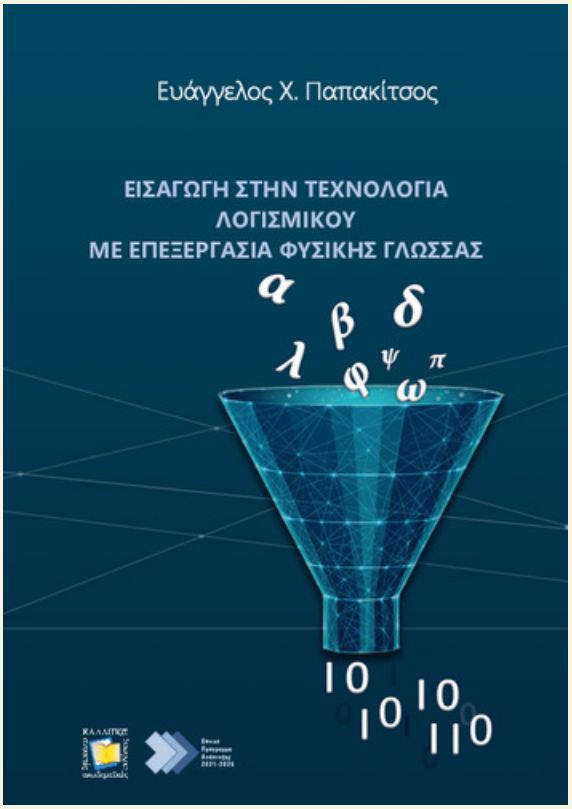

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Abstract

This book is a selection of teaching material for the teaching of five postgraduate-level courses, which was initially gathered and cognitively organized in three volumes. The scattered original material today is presented renewed in this volume and intended for postgraduate students that are graduates of Humanities, who wish to deal with the scientific field of Computational Linguistics and its applications (Natural Language Processing). The content of this book is structured in twelve chapters. The first five chapters cover those topics that are a prerequisite for creating quality Natural Language Processing software (and more). That is, these chapters mainly cover issues of preparing a software creation project, such as the issues of project organization and management, recording of procedures, methods, options and results, as well as the quality control of all previous ones. Because this knowledge of the above topics cultivates a work culture of total quality, it is considered here that their teaching should precede, contrary to what may happen in other corresponding manuals, where these topics usually follow. The remaining chapters mainly cover the methodological issues of the realization of Natural Language Processing software products, with the rationale that every software application (regardless of the field) consists of three basic components: (a) the data and their management, (b) the processing algorithms of the data, as well as (c) the interaction of the user with the information system, through the interface environment.

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