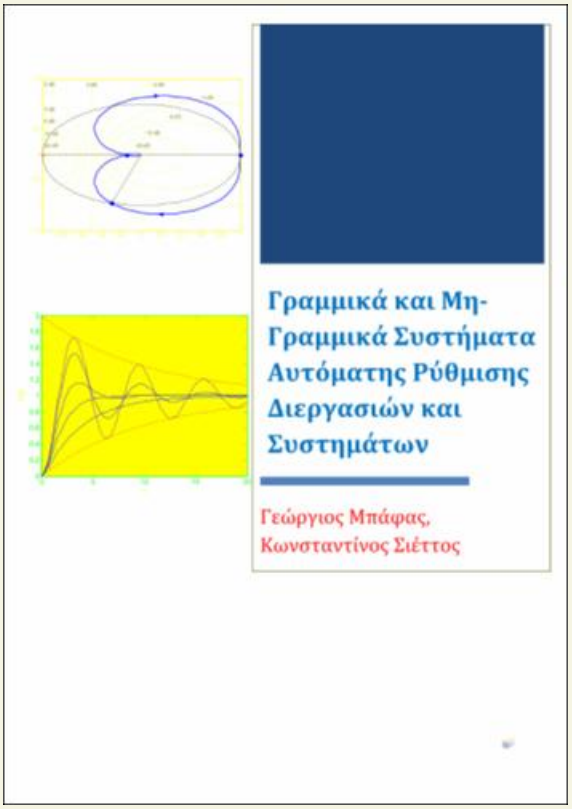

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Abstract

The textbook seeks to provide the necessary theoretical and technical background for the analysis, design and implementation of automatic control systems for processes and systems (linear and non-linear). In particular, the material is devoted to modeling and dynamic analysis of system behaviour and the design of controllers, analog and digital, to achieve the desired dynamics. For a more comprehensive presentation of the subject, modern techniques based on technical intelligence, in particular fuzzy systems, have been included in the syllabus. By its very nature, the development and understanding of the subject matter makes the use of computers for both simulation and controller design a prerequisite. In this direction the book is accompanied by typical examples in Matlab environment for the students' practice. The book can be used at both undergraduate and postgraduate level with appropriate division of the material. Each chapter includes the main bibliography where the interested reader can refer to for further deepening and expansion on the specific material.

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