

## **METADATA**

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Authors: Nikolaidis, V., Associate Professor, UOP

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## Abstract

The R system is a tool widely used in statistical, data analysis and machine learning applications. Furthermore, due to the extensibility and flexibility of the R system, the tool has been proven suitable for applications in many other domains and fields of knowledge. R can be used interactively, without programming, but is also a programming language and a tool for software development. It is on this second nature of R (that of a programming language) that this book focuses on. Emphasizing on the use of examples, the book starts with an introduction to programming and the R programming language, and progresses to more advanced topics. The approach taken by the book aims

to introduce R to new programmers and/or new users of this particular language using simple, familiar examples of general programming and bypassing, to some extent, the presentation of R as a scientific tool. The relevant concepts, techniques and tools used by developers, the basic principles that govern R language, its peculiarities, the added capabilities produced by its ecosystem (sources, packages, application development environments etc.) are discussed in this first part of the book. In the second part, the book proceeds to more advanced topics, presenting some features of the R language that allow the development of more complex applications and solutions.









