

MATLAB Random Signals and Processes Primer

With an Introduction to Statistics and Machine Learning

This book offers a clear and intuitive approach to the world of random signals and processes, relating them with fundamental statistics and machine learning techniques—all through the lens of MATLAB. It is specifically designed for readers who prefer clarity over complexity, demystifying key concepts in random signals and processes, statistics, and machine learning. Even with a minimal amount of mathematical background, readers can confidently engage with the book, as it focuses on concepts and related terms clearly and simply.

- Provides a highly accessible introduction to the concepts and key terms related to probability, random variables and processes, statistics, and machine learning;
- Assumes minimal mathematical background and provides straightforward explanations of key terms, making the learning process comfortable and manageable;
- Introduction to core statistical concepts, descriptive and inferential statistics;
- A clear and intuitive approach to regression techniques such as linear, polynomial, and multiple regression;
- Primer on machine learning techniques, explaining their crucial role and their relationship with probability, random signals, and statistics;
- An intuitive and simplified approach to machine learning techniques such as logistic regression, naive Bayes, Gaussian naive Bayes, and KNN is provided;
- Includes many examples in MATLAB, a variety of exercises, as well as end-of-chapter quizzes for self-assessment, ensuring an interactive and engaging learning experience.

This book offers a clear and intuitive approach to the world of random signals and processes, relating them with fundamental statistics and machine learning techniques—all through the lens of MATLAB. It is specifically designed for readers who prefer clarity over complexity, demystifying key concepts in random signals and processes, statistics, and machine learning. Even with a minimal amount of mathematical background, readers can confidently engage with the book, as it focuses on concepts and related terms clearly and simply.

- Provides a highly accessible introduction to the concepts and key terms related to probability, random variables and processes, statistics, and machine learning;

- Assumes minimal mathematical background and provides straightforward explanations of key terms, making the learning process comfortable and manageable;

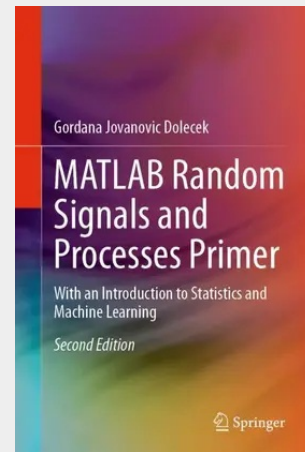
- Introduction to core statistical concepts, descriptive and inferential statistics;

- A clear and intuitive approach to regression techniques such as linear, polynomial, and multiple regression;

- Primer on machine learning techniques, explaining their crucial role and their relationship with probability, random signals, and statistics;

- An intuitive and simplified approach to machine learning techniques such as logistic regression, naive Bayes, Gaussian naive Bayes, and KNN is provided;

- Includes many examples in MATLAB, a variety of exercises, as well as end-of-chapter quizzes for self-assessment, ensuring an interactive and engaging learning experience.



139,09 €

129,99 € (zzgl. MwSt.)

vorbestellbar, Erscheinungstermin ca. Dezember 2026

Artikelnummer: 9783032094827

Medium: Buch

ISBN: 978-3-032-09482-7

Verlag: Springer-Verlag GmbH

Erscheinungstermin: 10.12.2026

Sprache(n): Englisch

Auflage: 2. Auflage 2026

Produktform: Gebunden

Seiten: 723

Format (B x H): 155 x 235 mm

