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# Probability Theory and Statistical Applications

A Profound Treatise for Self-Study

By **Peter Zörnig**

## ABOUT THE BOOK

This accessible and easy-to-read book provides many examples to illustrate diverse topics in probability and statistics, from initial concepts up to advanced calculations. Special attention is devoted e.g. to independency of events, inequalities in probability and functions of random variables. The book is directed to students of mathematics, statistics, engineering, and other quantitative sciences, in particular to readers who need or want to learn by self-study. The author is convinced that sophisticated examples are more useful for the student than a lengthy formalism treating the greatest possible generality.

Characteristic features are:

- Many examples and illustrations
- Numerous exercises with detailed solutions.
- Mathematically rigorous, but exaggerate formalism is avoided

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## ABOUT THE AUTHOR

**Peter Zörnig**, studied mathematics and physics at the University of Dortmund and received his PhD at Fernuniversität Hagen in 1990. He is currently associate professor at the Statistical Department of the University of Brasilia/Brazil. He has published several books and research papers in the areas of linear programming, mathematics for economists, graph theory, probability and quantitative linguistics.

## TOPICS

Mathematics • Probability and Statistics

## AUDIENCE

Students of Mathematics, Statistics, Computer Science, Engineering; Academic Libraries

## KEYWORDS

Univariate and multivariate models; Probability measures; Transforms of random variables; Generating functions; Convergence of random variables; Order statistics; Statistical applications

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