Modern Statistical Methods and Theory

Based on courses taught at the University of Cambridge, this text presents core contemporary statistical methods and theory in an accessible, self-contained and rigorous fashion, with a focus on finite-sample guarantees as opposed to asymptotic arguments. Many of the topics and results have not appeared in book form previously, and some constitute new research. The prerequisites are relatively light (primarily a good grasp of linear algebra and real analysis) and complete solutions to all 250+ exercises are available online. This book is the perfect entry point to the subject for master's and graduate-level students in statistics, data science and machine learning, as well as related disciplines such as artificial intelligence, signal processing, information theory, electrical engineering and econometrics. Researchers in these fields will also find it an invaluable resource. This title is also available as Open Access on Cambridge Core.

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An Introduction to Nonparametric and High-Dimensional Statistics

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University of Cambridge

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