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Nota di contenuto	CONTENTS; PREFACE; 1 INTRODUCTION; 1.1 The subject of order statistics; 1.2 The scope and limits of this book; 1.3 Notation; 1.4 Exercises; 2 BASIC DISTRIBUTION THEORY; 2.1 Distribution of a single order statistic; 2.2 Joint distribution of two or more order statistics; 2.3 Distribution of the range and of other systematic statistics; 2.4 Order statistics for a discrete parent; 2.5 Conditional distributions, order statistics as a Markov chain, and independence results; 2.6 Related statistics; 2.7 Exercises; 3 EXPECTED VALUES AND MOMENTS; 3.1 Basic formulae 3.2 Special continuous distributions3.3 The discrete case; 3.4 Recurrence relations; 3.5 Exercises; 4 BOUNDS AND APPROXIMATIONS FOR MOMENTS OF ORDER STATISTICS; 4.1 Introduction; 4.2 Distribution-free bounds for the moments of order statistics and of the range; 4.3 Bounds and approximations by orthogonal inverse expansion; 4.4 Stochastic orderings; 4.5 Bounds for the expected values of order statistics in terms of quantiles of the parent distribution; 4.6 Approximations to moments in terms of the quantile function and its derivatives; 4.7 Exercises; 5 THE NON-IID CASE; 5.1

Introduction

5.2 Order statistics for independent nonidentically distributed variates5.3 Order statistics for dependent variates; 5.4 Inequalities and recurrence relations-non-IID cases; 5.5 Bounds for linear functions of order statistics and for their expected values; 5.6 Exercises; 6 FURTHER DISTRIBUTION THEORY; 6.1 Introduction; 6.2 Studentization; 6.3 Statistics expressible as maxima; 6.4 Random division of an interval; 6.5 Linear functions of order statistics; 6.6 Moving order statistics; 6.7 Characterizations; 6.8 Concomitants of order statistics; 6.9 Exercises
7 ORDER STATISTICS IN NONPARAMETRIC INFERENCE7.1 Distribution-free confidence intervals for quantiles; 7.2 Distribution-free tolerance intervals; 7.3 Distribution-free prediction intervals; 7.4 Exercises; 8 ORDER STATISTICS IN PARAMETRIC INFERENCE; 8.1 Introduction and basic results; 8.2 Information in order statistics; 8.3 Bootstrap estimation of quantiles and of moments of order statistics; 8.4 Least-squares estimation of location and scale parameters by order statistics; 8.5 Estimation of location and scale parameters for censored data
8.6 Life testing, with special emphasis on the exponential distribution8. 7 Prediction of order statistics; 8.8 Robust estimation; 8.9 Exercises; 9 SHORT-CUT PROCEDURES; 9.1 Introduction; 9.2 Quick measures of location; 9.3 Range and mean range as measures of dispersion; 9.4 Other quick measures of dispersion; 9.5 Quick estimates in bivariate samples; 9.6 The studentized range; 9.7 Quick tests; 9.8 Ranked-set sampling; 9.9 O-statistics and L-moments in data summarization; 9.10 Probability plotting and tests of goodness of fit; 9.11 Statistical quality control; 9.12 Exercises
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Sommario/riassunto

A completely revised and expanded edition of a classic resource In the over twenty years since the publication of the Second Edition of Order Statistics, the theories and applications of this dynamic field have changed markedly. Meeting the challenges and demands of today's students and research community, authors H. A. David and H. N. Nagaraja return with a completely revised and updated Order Statistics, Third Edition. Chapters two through nine of this comprehensive volume deal with finite-sample theory, with individual topics grouped under distribution theory (chapters two through six)