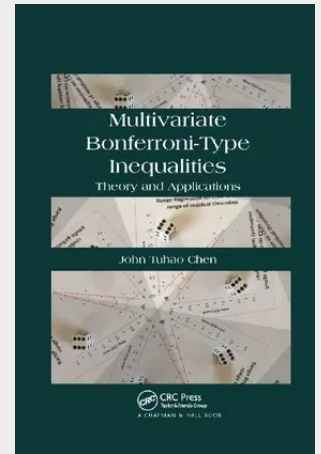


Chen

Multivariate Bonferroni-Type Inequalities

Theory and Applications

Multivariate Bonferroni-Type Inequalities: Theory and Applications presents a systematic account of research discoveries on multivariate Bonferroni-type inequalities published in the past decade. The emergence of new bounding approaches pushes the conventional definitions of optimal inequalities and demands new insights into linear and Fréchet optimality. The book explores these advances in bounding techniques with corresponding innovative applications. It presents the method of linear programming for multivariate bounds, multivariate hybrid bounds, sub-Markovian bounds, and bounds using Hamilton circuits. The first half of the book describes basic concepts and methods in probability inequalities. The author introduces the classification of univariate and multivariate bounds with optimality, discusses multivariate bounds using indicator functions, and explores linear programming for bivariate upper and lower bounds. The second half addresses bounding results and applications of multivariate Bonferroni-type inequalities. The book shows how to construct new multiple testing procedures with probability upper bounds and goes beyond bivariate upper bounds by considering vectorized upper and hybrid bounds. It presents an optimization algorithm for bivariate and multivariate lower bounds and covers vectorized high-dimensional lower bounds with refinements, such as Hamilton-type circuits and sub-Markovian events. The book concludes with applications of probability inequalities in molecular cancer therapy, big data analysis, and more.



96,10 €

96,10 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780367378523

Medium: Buch

ISBN: 978-0-367-37852-3

Verlag: Chapman and Hall/CRC

Erscheinungstermin: 05.09.2019

Sprache(n): Englisch

Auflage: 1. Auflage 2019

Produktform: Kartoniert

Gewicht: 465 g

Seiten: 302

Format (B x H): 156 x 234 mm

