#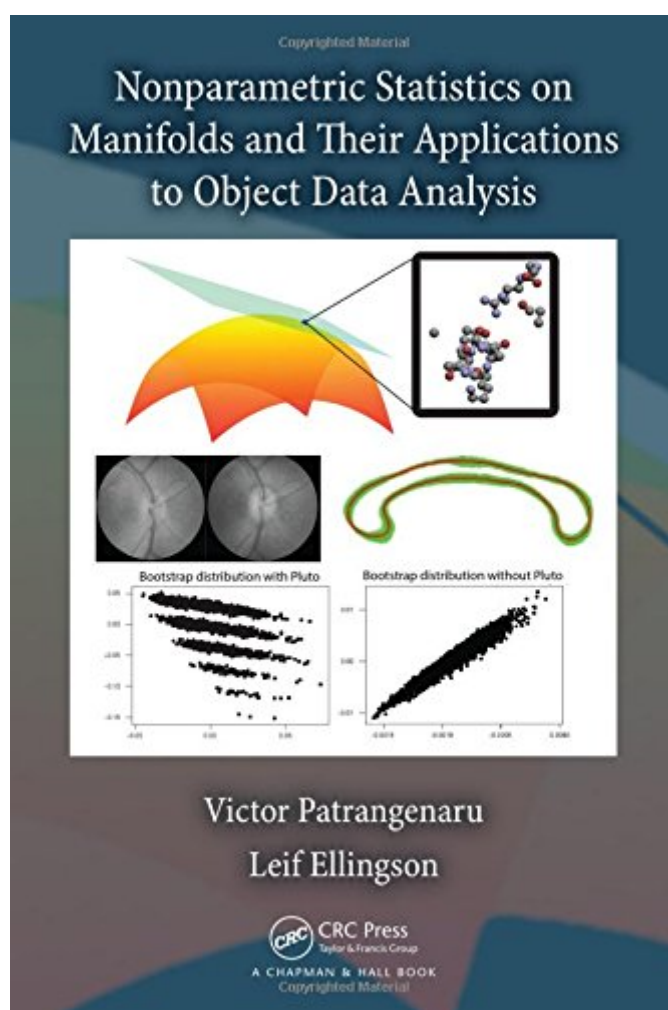 Nonparametric Statistics on Manifolds and Their Applications to Object Data Analysis (Chapman & Hall/CRC Monographs on Statistics & Applied Probab) PDF

Nonparametric Statistics on Manifolds and Their Applications to Object Data Analysis (Chapman & Hall/CRC Monographs on Statistics & Applied Probab) by Victor Patrangenaru, Leif Ellingson ISBN 1439820503

A New Way of Analyzing Object Data from a Nonparametric Viewpoint

Nonparametric Statistics on Manifolds and Their Applications to Object Data Analysis

provides one of the first thorough treatments of the theory and methodology for analyzing data on manifolds. It also presents in-depth applications to practical problems arising in a variety of fields, including statistics, medical imaging, computer vision, pattern recognition, and bioinformatics.

The book begins with a survey of illustrative examples of object data before moving to a review of concepts from mathematical statistics, differential geometry, and topology. The authors next describe theory and methods for working on various manifolds, giving a historical perspective of concepts from mathematics and statistics. They then present problems from a wide variety of areas, including diffusion tensor imaging, similarity shape analysis, directional data analysis, and projective shape analysis for machine vision. The book concludes with a discussion of current related research and graduate-level teaching topics as well as considerations related to computational statistics.

Researchers in diverse fields must combine statistical methodology with concepts from projective geometry, differential geometry, and topology to analyze data objects arising from non-Euclidean object spaces. An expert-driven guide to this approach, this book covers the general nonparametric theory for analyzing data on manifolds, methods for working with specific spaces, and extensive applications to practical research problems. These problems show how object data analysis opens a formidable door to the realm of big data analysis.

Nonparametric Statistics on Manifolds and Their Applications to Object Data Analysis (Chapman & Hall/CRC Monographs on Statistics & Applied Probab) Review

This Nonparametric Statistics on Manifolds and Their Applications to Object Data Analysis (Chapman & Hall/CRC Monographs on Statistics & Applied Probab) book is not really ordinary book, you have it then the world is in your hands. The benefit you get by reading this book is actually information inside this reserve incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This kind of Nonparametric Statistics on Manifolds and Their Applications to Object Data Analysis (Chapman & Hall/CRC Monographs on Statistics & Applied Probab) without we recognize teach the one who looking at it become critical in imagining and analyzing. Don't be worry Nonparametric Statistics on Manifolds and Their Applications to Object Data Analysis (Chapman & Hall/CRC Monographs on Statistics & Applied Probab) can bring any time you are and not make your tote space or bookshelves' grow to be full because you can have it inside your lovely laptop even cell phone. This Nonparametric Statistics on Manifolds and Their Applications to Object Data Analysis (Chapman & Hall/CRC Monographs on Statistics & Applied Probab) having great arrangement in word and layout, so you will not really feel uninterested in reading.