Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability)

Guojun Gan, Chaoqun Ma, Jianhong Wu

Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability)

Guojun Gan, Chaoqun Ma, Jianhong Wu

Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) Guojun Gan, Chaoqun Ma, Jianhong Wu

Cluster analysis is an unsupervised process that divides a set of objects into homogeneous groups. This book starts with basic information on cluster analysis, including the classification of data and the corresponding similarity measures, followed by the presentation of over 50 clustering algorithms in groups according to some specific baseline methodologies such as hierarchical, center-based, and search-based methods. As a result, readers and users can easily identify an appropriate algorithm for their applications and compare novel ideas with existing results. The book also provides examples of clustering applications to illustrate the advantages and shortcomings of different clustering architectures and algorithms. Application areas include pattern recognition, artificial intelligence, information technology, image processing, biology, psychology, and marketing. Readers also learn how to perform cluster analysis with the C/C++ and MATLAB® programming languages. Audience The following groups will find this book a valuable tool and reference: applied statisticians; engineers and scientists using data analysis; researchers in pattern recognition, artificial intelligence, machine learning, and data mining; and applied mathematicians. Instructors can also use it as a textbook for an introductory course in cluster analysis or as source material for a graduate-level introduction to data mining. Contents Preface; Chapter 1: Data Clustering; Chapter 2: Data Types; Chapter 3: Scale Conversion; Chapter 4: Data Standardizatin and Transformation; Chapter 5: Data Visualization; Chapter 6: Similarity and Dissimilarity Measures; Chapter 7: Hierarchical Clustering Techniques; Chapter 8: Fuzzy Clustering Algorithms; Chapter 9: Center Based Clustering Algorithms; Chapter 10: Search Based Clustering Algorithms; Chapter 11: Graph Based Clustering Algorithms; Chatper 12: Grid Based Clustering Algorithms; Chapter 13: Density Based Clustering Algorithms; Chapter 14: Model Based Clustering Algorithms; Chapter 15: Subspace Clustering; Chapter 16: Miscellaneous Algorithms; Chapter 17: Evaluation of Clustering Algorithms; Chapter 18: Clustering Gene Expression Data; Chapter 19: Data Clustering in MATLAB; Chapter 20: Clustering in C/C++; Appendix A: Some Clustering Algorithms; Appendix B: Thekd-tree Data Structure; Appendix C: MATLAB Codes; Appendix D: C++ Codes; Subject Index; Author Index

[Download](#) Data Clustering: Theory, Algorithms, and Applicati ...pdf

[Read Online](#) Data Clustering: Theory, Algorithms, and Applica ...pdf

Download and Read Free Online Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) Guojun Gan, Chaoqun Ma, Jianhong Wu

---

From reader reviews:

Seth Sawyer:

Do you have favorite book? If you have, what is your favorite's book? Book is very important thing for us to know everything in the world. Each reserve has different aim or perhaps goal; it means that e-book has different type. Some people experience enjoy to spend their time and energy to read a book. These are reading whatever they consider because their hobby will be reading a book. Think about the person who don't like looking at a book? Sometime, person feel need book when they found difficult problem or even exercise. Well, probably you should have this Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability).

Andrew Fogarty:

The book Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) can give more knowledge and also the precise product information about everything you want. Exactly why must we leave the best thing like a book Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability)? Wide variety you have a different opinion about e-book. But one aim which book can give many info for us. It is absolutely appropriate. Right now, try to closer along with your book. Knowledge or facts that you take for that, it is possible to give for each other; you may share all of these. Book Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) has simple shape however you know: it has great and big function for you. You can seem the enormous world by open and read a reserve. So it is very wonderful.

Teressa Fernandez:

Information is provisions for those to get better life, information currently can get by anyone from everywhere. The information can be a knowledge or any news even restricted. What people must be consider if those information which is inside the former life are hard to be find than now is taking seriously which one is appropriate to believe or which one typically the resource are convinced. If you have the unstable resource then you buy it as your main information there will be huge disadvantage for you. All those possibilities will not happen inside you if you take Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) as the daily resource information.

Don Gonzales:

This Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) is new way for you who has interest to look for some information given it relief your hunger details. Getting deeper you into it getting knowledge more you know otherwise you who still having bit of digest in reading this Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) can be the light food for you because the information inside this particular book is easy to get by anyone. These books develop itself in the form that is certainly reachable by anyone,

that's why I mean in the e-book contact form. People who think that in publication form make them feel drowsy even dizzy this reserve is the answer. So there is absolutely no in reading a publication especially this one. You can find what you are looking for. It should be here for an individual. So , don't miss the item! Just read this e-book sort for your better life and also knowledge.

Download and Read Online Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) Guojun Gan, Chaoqun Ma, Jianhong Wu #4HDRSULGJO6

Read Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) by Guojun Gan, Chaoqun Ma, Jianhong Wu for online ebook

Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) by Guojun Gan, Chaoqun Ma, Jianhong Wu Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) by Guojun Gan, Chaoqun Ma, Jianhong Wu books to read online.

Online Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) by Guojun Gan, Chaoqun Ma, Jianhong Wu ebook PDF download

Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) by Guojun Gan, Chaoqun Ma, Jianhong Wu Doc

Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) by Guojun Gan, Chaoqun Ma, Jianhong Wu Mobipocket

Data Clustering: Theory, Algorithms, and Applications (ASA-SIAM Series on Statistics and Applied Probability) by Guojun Gan, Chaoqun Ma, Jianhong Wu EPub