

Data clustering, also known as cluster analysis, is an unsupervised process that divides a set of objects into homogeneous groups. Since the publication of the first edition of this monograph in 2007, development in the area has exploded, especially in clustering algorithms for big data and open-source software for cluster analysis. This second edition reflects these new developments.

Data Clustering: Theory, Algorithms, and Applications, Second Edition

- covers the basics of data clustering;
- includes a list of popular clustering algorithms; and
- provides program code that helps users implement clustering algorithms.

This book will be of interest to researchers, practitioners, and data scientists as well as undergraduate and graduate students. Mark Asch is an associate professor in the Department of Mathematics at the University of Connecticut. Before moving to academia, he worked at a life insurance company and at a hedge fund. He is a Fellow of the Society of Actuaries and his research interests fall within the interdisciplinary areas of actuarial science and data science. He is a professor of management science in the College of Business Administration at Hunan University, where he served as dean from 2009 to 2019. His research interests include financial engineering, financial risk management, computational management, resource and environmental management, system optimization, and decision-making theory.

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Mark Asch is a University Distinguished Research Professor in the Department of Mathematics and Statistics, the founding director of the Laboratory for Industrial and Applied Mathematics, and a senior Canada Research Chair in Industrial and Applied Mathematics at York University. He has received several prestigious awards, including the Queen Elizabeth II Diamond Jubilee Medal from the Government of Canada, and the CAIMS-Fields Industrial Mathematics Prize. His research interests include nonlinear dynamics, delay differential equations, neural networks, pattern recognition, mathematical ecology, epidemiology, and big data analytics.

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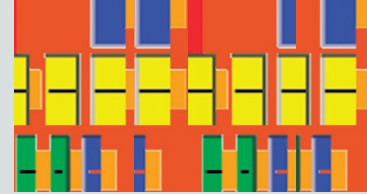
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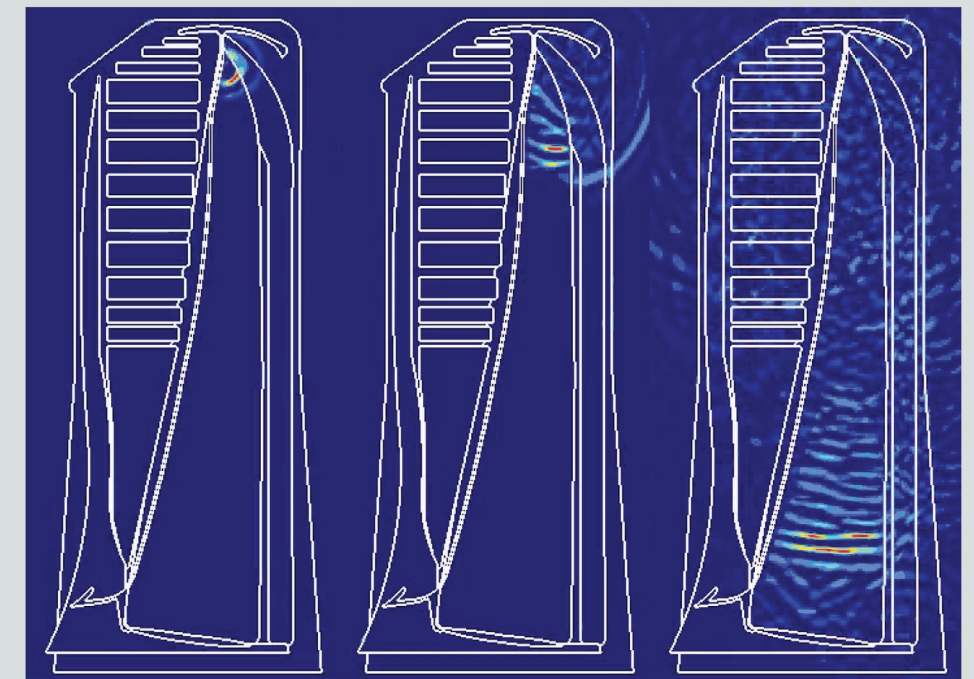
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