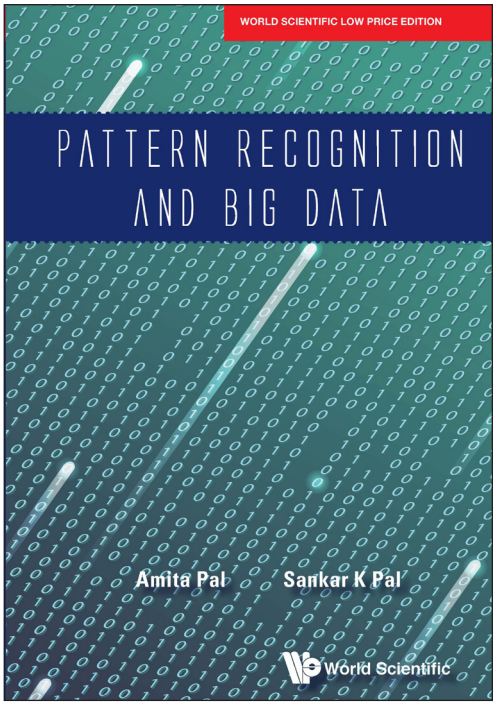
PATTERN RECOGNITION AND BIG DATA

By
Amita Pal (*Indian Statistical Institute, India*)
and Sankar K Pal (*Indian Statistical Institute, India*)



ISBN 9780000988973
Extent: 636pp, PB
Pub Date: 2020
Price: Rs. 1795

ABOUT THE BOOK

Containing twenty six contributions by experts from all over the world, this book presents both research and review material describing the evolution and recent developments of various pattern recognition methodologies, ranging from statistical, linguistic, fuzzy-set-theoretic, neural, evolutionary computing and rough-set-theoretic to hybrid soft computing, with significant real-life applications.

Pattern Recognition and Big Data provides state-of-the-art classical and modern approaches to pattern recognition and mining, with extensive real life applications. The book describes efficient soft and robust machine learning algorithms and granular computing techniques for data mining and knowledge discovery; and the issues associated with handling Big Data. Application domains considered include bioinformatics, cognitive machines (or machine mind developments), biometrics, computer vision, the e-nose, remote sensing and social network analysis.

READERSHIP

Graduate students, researchers, academics and industry practitioners in pattern recognition.

Feel Books Pvt. Ltd.
4381/4 Ansari Road
Daryaganj
New Delhi 110002
Tel: +91 11 47472600

CONTENTS

- Pattern Recognition: Evolution, Mining and Big Data
- Pattern Classification with Gaussian Processes
- Active Multitask Learning using Supervised and Shared Latent Topics
- Sparse and Low-Rank Models for Visual Domain Adaptation
- Pattern Classification using the Principle of Parsimony: Two Examples
- Robust Learning of Classifiers in the Presence of Label Noise
- Sparse Representation for Time-Series Classification
- Fuzzy Sets as a Logic Canvas for Pattern Recognition
- Optimizing Neural Network Structures to Match Pattern Recognition Task Complexity
- Multi-Criterion Optimization and Decision Making Using Evolutionary Computing
- Rough Sets in Pattern Recognition
- The Twin SVM Minimizes the Total Risk
- Dynamic Kernels based Approaches to Analysis of Varying Length Patterns in Speech and Image Processing Tasks
- Fuzzy Rough Granular Neural Networks for Pattern Analysis
- Fundamentals of Rough-Fuzzy Clustering and Its Application in Bioinformatics
- Keygraphs: Structured Features for Object Detection and Applications
- Mining Multimodal Data
- Solving Classification Problems on Human Epithelial Type 2 Cells for Anti-Nuclear Antibodies Test: Traditional versus Contemporary Approaches
- Representation Learning for Spoken Term Detection
- Tongue Pattern Recognition to Detect Diabetes Mellitus and Non-Proliferative Diabetic Retinopathy
- Moving Object Detection using Multi-layer Markov Random Field Model
- Recent Advances in Remote Sensing Time Series Image Classification
- Sensor Selection for E-Nose
- Understanding the Usage of Idioms in Twitter Social Network
- Sampling Theorems for Twitter: Ideas from Large Deviation Theory
- A Machine-mind Architecture and Z*-numbers for Real-world Comprehension

For orders and enquiries, please contact us:

FEEL Books

FEELBOOKS PVT. LTD.

DELHI	**4381/4 Ansari Road, Daryaganj, New Delhi 110002**		**Tel: +91-11-47472630**
	Pushpendra Kumar	**Mobile: +91 9015043442**	**Email: orders@feelbooks.in**
BENGALURU	**C-22, Brigade MM, KR Road, Jayanagar 7th Block, Bengaluru 560070**		**Tel: +91-80-26762129**
	Shekar Reddy	**Mobile: +91 9945234476**	**Email: bangalore@feelbooks.in**
MUMBAI	**Vijay Kumar**	**Mobile: +91 9871176434**	**Email: vkumar@feelbooks.in**
CHENNAI	**G Srinivasan**	**Mobile: +91 9003047502**	**Email: gsrinivasan@feelbooks.in**
KOLKATA	**Dhrubajyoti Bhattacharjee**	**Mobile: +91 9836160013**	**Email: dbhattacharjee@feelbooks.in**
HYDERABAD	**K.S.Vishwanath**	**Mobile: +91 9871745850**	**Email: kvishwanath@feelbooks.in**

***For Catalogues & title lists*: marketing@feelbooks.in**

FOLLOW US ON LinkedIn

www.feelbooks.in

FOLLOW US ON facebook

For any queries, please email us at marketing@feelbooks.in