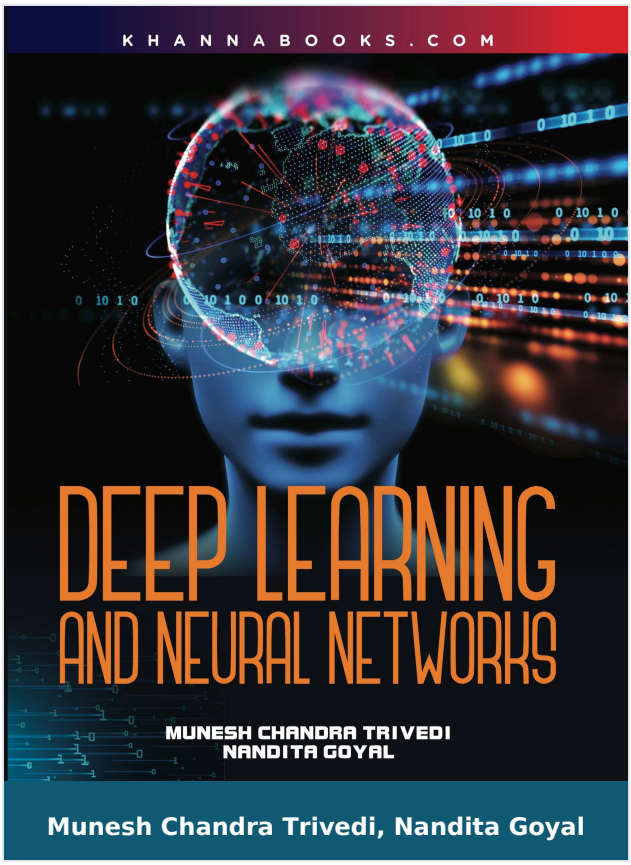

Deep Learning and Neural Networks

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Product Description

The focus on the theory, algorithms, implementations and practical applications of deep learning and neural networks makes An Insight into Deep Learning and Neural Networks useful for students of Computer Science and mathematics. The book introduces neural networks starting with a quick tour of the very first ANN architectures, then covering topics such as training nets, recurrent neural networks, and reinforcement learning. Where possible, an application -centric view is highlighted to provide an understanding of the practical uses of each class of techniques.

Students of Computer Science and other related natural sciences will find it easy -to- read textbook, excellent for self -study, a high school level Knowledge of mathematics being the only pre-requisite to understand the material.

Salient Features of the Book:

1. The language is simple and easily understandable.
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3. Simple and intuitive discussions of neural networks and deep learning.
4. Provides mathematical details without losing the reader in complexity.
5. Include exercises and examples.
6. Discusses both traditional neural networks and recent deep learning models.
7. Covers both classical and modern models in deep learning.
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- Convolution Neural Network, Image Classification and CNN.
- RNN and LSTMs, Applications of RNNs in Real World.
- Creating and Deploying Networks using Tensor Flow and Keras.

Author

Munesh Chandra Trivedi

Dr. Munesh Chandra Trivedi has more than 20 years of experience in the field of computer science & Engineering and has worked in Prestigious Institutions. He has more than 10 years' experience in various administrative responsibilities e.g., Dean (academics), Head of Department, TEQIP-111 Coordinator, PG coordinator, EDC cell Coordinator. Currently working Tripura, India, and Associate Professor and HoD (IT), Rajkiya Engineering College, Azamgarh, up (state Govt Institution of UP) with the additional responsibility of Dean Academics of the institute & Associate Dean UG Programs, Dr. APJ Abdul Kalam Technical University, Lucknow (State Technical University). He was also the Director (In-charge) at Rajkiya Engineering College, Azamgarh. He had successfully filed 81 patents (65 National and 16 International Patents (Germany, South Africa, and Australia)), out of which 40 patents were granted. He has published 12 textbooks and 168 research papers in different International Journals and proceedings of repute. He has also edited 38 books for springer Nature. He successfully supervised 14 PhD students and received numerous awards, including the Young scientist Visiting Fellowship, Albert Einstein Research scientist Award, Best senior Faculty Award, Outstanding Scientist, Dronacharya Award, Author of the Year, and vigyan Ratan award from different national, as well as international forums. He has organized more than 32

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Nandita Goyal

Dr. Nandita Goyal has more than 17 years' experience in Teaching and Research. Her areas of interest are Cloud Computing, Deep learning and Neural Networks. She has published many research papers in different reputed International Journals and Conferences.

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