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Unsupervised Learning
Foundations of Neural Computation
eSIDed by Geoffrey Hinton and Terrence J. Sejnowski

Since its founding in 1989 by Terrence J. Sejnowski, Neural Computation has become the leading journal in the field. Foundations of Neural Computation collects, by topic, the most significant papers that have appeared in the journal over the past ten years.

This volume, on unsupervised learning algorithms, focuses on neural network learning algorithms that do not require an explicit teacher. The goal of unsupervised learning is to extract an efficient internal representation of the statistical structure implicit in the inputs. These algorithms provide insights into the development of the cerebral cortex and implicit learning in humans. They are also of interest to engineers working in areas such as computer vision and speech recognition who seek efficient representations of raw input data.

Geoffrey Hinton is Director of the Gatsby Computational Neuroscience Unit at University College, London. Terrence J. Sejnowski is a Howard Hughes Medical Institute Investigator and directs the Computational Neurobiology Laboratory at the Salk Institute for Biological Studies. He is Professor of Biology at the University of California, San Diego.

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