# Unsupervised Learning

Foundations of Neural Computation

Edited by

Geoffrey Hinton Terrence J. Sejnowski

## Unsupervised Learning

#### Computational Neuroscience

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

A Bradford Book The MIT Press Cambridge, Massachusetts London, England

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Library of Congress Cataloging-in-Publication Data

Unsupervised learning: foundations of neural computation / edited by Geoffrey Hinton and Terrence J. Sejnowski.

p. cm.—(Computational neuroscience)

"A Bradford book."

Includes bibliographical references and index.

ISBN 0-262-58168-X (pbk.: alk. paper)

1. Learning—Physiological aspects. 2. Neural networks.

3. Learning—Computer simulation. 4. Neural computers. I. Hinton, Geoffrey E. II. Sejnowski, Terrence J. (Terrence Joseph) III. Series.

OP408.U57 1998

612.8'2—dc21

98-14784

CIP

This book was printed and bound in the United States of America.

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#### **Unsupervised Learning**

Foundations of Neural Computation edited 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.

Computational Neuroscience series A Bradford Book

The MIT Press
Massachusetts Institute of Technology
Cambridge, Massachusetts 02142
http://mitpress.mit.edu

jacket design by Jim McWethy

HINUP 0-262-58168-X

