# Advanced Database Techniques

Daniel Martin

The MIT Press
Cambridge, Massachusetts
London, England

This book was originally published as *Techniques avancées pour bases de données*, © 1985 by BORDAS, Paris, France.



This book was set in Times Roman by Achorn Graphic Services and printed and bound by Halliday Lithograph in the United States of America.

**Library of Congress Cataloging-in-Publication Data**

Martin, Daniel, ingénieur I.D.N.
Advanced database techniques.

(MIT Press series in information systems)
1. Data base management. I. Title. II. Series.
QA76.9.D3M349 1986 005.74 85-24019
ISBN 0-262-13215-X

# Advanced Database Techniques

**MIT Press Series in Information Systems**
Michael Lesk, editor

*Nested Transactions: An Approach to Reliable Distributed Computing*
J. Eliot B. Moss, 1985

*Advanced Database Techniques*
Daniel Martin, 1986

Peter Denning, consulting editor, computer science books

## Series Foreword

In *Advanced Database Techniques,* Daniel Martin provides an excellent overview of databases and their use. Researchers, practitioners, and students looking for a way to understand many kinds of databases using a few powerful concepts should read this book. The classification of relational and navigational databases is simpler and includes more kinds of databases than the traditional division into relational, hierarchical, and network databases. The book is remarkable for its specific information about timing, sizes, and other practical matters. Its many examples and analogies, plus the clear writing, make it easy to use. In addition, this book goes beyond the core of database technology to talk about specification, testing, and other areas essential to problem solving but ignored in more abstruse works. It will repay both quick reading and longer study.

Michael Lesk

## How to Read This Book

Readers with *considerable background* in database management and data processing (DP) in general may want to read this book in its natural order, starting with chapter 1. They will find useful information and valuable ideas and techniques in all chapters.

Readers with *some DP experience* but no database experience and those who wish to consider this as *a course in database management* can read section 1.1.2, next chapters 3, 4, and 5 (except section 5.4), and then chapters 1, 2, 6, and 7.

Readers mainly interested in *new ideas* can concentrate on section 1.3 and chapters 2, 3, 4, and 6, which contain many new, far-reaching concepts.

References to chapter, section, and subsection always begin with the chapter number: subsection 3 of section 2 of chapter 1 is numbered 1.2.3.

## Acknowledgment

I would like to thank my friend Malcolm Stiefel for the superb proofreading task he performed on this book. He corrected many language and spelling mistakes and suggested improvements to the readability of some complex technical paragraphs.

Malcolm is a Group Leader with the MITRE Corporation of Bedford, Massachusetts, with considerable background in DP. He contributes to a number of DP magazines and lectures in the United States and overseas. He also teaches a public course that I wrote based on this book at Integrated Computer Systems, an educational institution.

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