Map Framework

Mark McKenney · Markus Schneider

Map Framework

A Formal Model of Maps as a Fundamental Data Type in Information Systems

Springer

Mark McKenney
Southern Illinois University
Edwardsville, IL
USA

Markus Schneider
University of Florida
Gainesville, FL
USA

ISBN 978-3-319-46764-1 ISBN 978-3-319-46766-5 (eBook)
DOI 10.1007/978-3-319-46766-5

Library of Congress Control Number: 2016952010

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

To my family, Elizabeth, Samantha, and Evelyn, for their support and understanding through the hours of research and writing that went into it. And to my parents, Scott and Joan, for their never-ending support and encouragement.

—Mark McKenney

To my family, Annette, Florian, and Tim, as well as my parents Hans and Christel Schneider, for their never-ending love, support, and encouragement.

—Markus Schneider

Contents

Acronyms

9IM	9-Intersection Model
DBMS	Database Management Systems
GIS	Geographical Information System
LPNP	Labeled Planar Nodeless Pseudograph
PNP	Planar Nodeless Pseudograph
SSH	Spatial Semantic Hierarchy
SSPG	Structural Spatial Partition Graph