## **CONTENTS**

Series Editor's Introduction		
Acknowledgments		vii
1.	Introduction	1
	1.1. Two Examples	2
	1.1.1. Occupational Prestige	2
	1.1.2. Married Women's Labor-Force Participation	2 2 3 4
	1.2. Plan of the Monograph	
	1.2.1. What Is Included?	4
	1.2.2. What Is Missing?	5
	1.3. Notes on Background, Approach, and Computing	7
2.	1 ory normal materials regression	8
	2.1. Review of Local Polynomial Simple Regression	8
	2.1.1. Selecting Order and Span	11
	2.1.2. Making Local Polynomial Estimates Resistant	
	to Outliers	12
	2.1.3. Statistical Inference	12
	2.2. Kernel Weights in Multiple Regression	14
	2.3. Span Selection, Statistical Inference, and Order	
	Selection	17
	2.3.1. Span	17
	2.3.2. Inference	18
	2.3.3. Order	19
	2.4. Obstacles to Nonparametric Multiple Regression	20
	2.5. An Illustration: Occupational Prestige	21
3.	Additive Regression Models	27
	3.1. Fitting the Additive Regression Model	31
	3.2. Some Statistical Details*	32
	3.2.1. Backfitting	32
	3.2.2. Statistical Inference	34
	3.3. Semiparametric Models and Models With Interactions	35

4.	Projection-Pursuit Regression	37
	4.1. Fitting the Projection-Pursuit Regression Model*	38
	4.2. Illustrations of Projection-Pursuit Regression	40
	4.2.1. A Simple Multiplicative Model	40
	4.2.2. Occupational Prestige Reprised	42
5.	Regression Trees	47
	5.1 Growing and Pruning Trees	50
	5.2 Reservations about Regression Trees	57
6.	Generalized Nonparametric Regression*	58
	6.1 Local Likelihood Estimation	59
	6.2 Generalized Additive Models	62
	6.2.1. Statistical Inference	65
	6.2.2. An Illustration: Labor-Force Participation	66
	6.3 Classification Trees	70
7.	Concluding Remarks: Integrating Nonparametric	
	Regression in Statistical Practice	74
Notes		79
References		81
About the Author		83

<sup>\*</sup>Sections marked by an asterisk contain more difficult material. See page 7 for details.