

# Modern Regression Techniques Using R

A Practical Guide for Students and Researchers

Daniel B. Wright and Kamala London



# Contents

Preface	vii
1 Very brief introduction to R	1
2 The basic regression	16
3 ANOVA as regression	29
4 ANCOVA: Lord's paradox and mediation analysis	48
5 Model selection and shrinkage	65
6 Generalized linear models (GLMs)	92
7 Regression splines and generalized additive models (GAMs)	112
8 Multilevel models	138
9 Robust regression	162
10 Conclusion – make your data cool	185
Glossary of R functions used in this book	190
References	196
Index	202