DESCRIPTION

This new edition continues to serve as a comprehensive guide to modern and classical methods of statistical computing. The book is comprised of four main parts spanning the field:

- Optimization
- Integration and Simulation
- Bootstrapping
- Density Estimation and Smoothing

Within these sections, each chapter includes a comprehensive introduction and step-by-step implementation summaries to accompany the explanations of key methods. The new edition includes updated coverage and existing topics as well as new topics such as adaptive MCMC and bootstrapping for correlated data. The book website now includes comprehensive R code for the entire book. There are extensive exercises, real examples, and helpful insights about how to use the methods in practice.
ABOUT THE AUTHOR

GEOF H. GIVENS, PhD, is Associate Professor in the Department of Statistics at Colorado State University. He serves as Associate Editor for *Computational Statistics and Data Analysis*. His research interests include statistical problems in wildlife conservation biology including ecology, population modeling and management, and automated computer face recognition.

JENNIFER A. HOETING, PhD, is Professor in the Department of Statistics at Colorado State University. She is an award-winning teacher who co-leads large research efforts for the National Science Foundation. She has served as associate editor for the *Journal of the American Statistical Association* and *Environmetrics*. Her research interests include spatial statistics, Bayesian methods, and model selection.

Givens and Hoeting have taught graduate courses on computational statistics for nearly twenty years, and short courses to leading statisticians and scientists around the world.

SERIES

Wiley Series in Computational Statistics

To purchase this product, please visit [https://www.wiley.com/en-us/9780470533314](https://www.wiley.com/en-us/9780470533314)