Effective use of today’s powerful GIS technology requires an understanding of the science of problem-solving that underpins it. Since the first edition published over a decade ago, this book has led the way, with its focus on the scientific principles that support GIS usage. It has also provided thorough, up-to-date coverage of GIS procedures, techniques and public policy applications. This unique combination of science, technology and practical problem solving has made this book a best-seller across a broad spectrum of disciplines. This fully updated 4th edition continues to deliver on these strengths.

ABOUT THE AUTHOR

Professor Paul Longley, Department of Geography, University College London, UK.

Professor Mike Goodchild, Department of Geography, University of California Santa Barbara, USA.

Professor David Maguire, ESRI, Redlands, USA.

Professor David Rhind, Vice Chancellor and Principle, City University, London, UK.
• Subtle change in the title reflects the evolution of the science of problem solving using GI technologies.

• Sets out the challenges posed by geographically referenced Big Data and Open Data in representing our world

• Discusses the emergence of data science and other new perspectives

• Assesses the implications of mobile computing and smartphone technologies for the development of citizen-centered science

• Reviews the ways in which open software is reshaping the analysis of geographic information

• Discusses new computationally-intensive analytic methods

• Suggests how geographic information science and systems help us to address the pervasive and dynamic challenges facing humanity.

• Presents principles and techniques of GI systems alongside the latest trends in data, software, societal exploitation of technologies, and industry developments

• Covers applications of how GI systems are used to solve problems from the global to the local levels in a broad range of disciplines, and for government, business, and community initiatives.

• Includes coverage of the latest Internet mapping interfaces and hand-held devices, and discusses their adoption and use in scientific investigation
• Includes learning objectives and review boxes throughout each chapter

To purchase this product, please visit https://www.wiley.com/en-us/9781119031307