Python GeoSpatial Analysis Essentials

Erik Westra

Python GeoSpatial Analysis Essentials

Erik Westra

Python GeoSpatial Analysis Essentials Erik Westra

Process, analyze, and display geospatial data using Python libraries and related tools

About This Book

- Learn to build a complete geospatial application from scratch using Python
- Create good-looking maps based on the results of your analysis
- This is a fast-paced guide to help you explore the key concepts of geospatial to obtain high quality spatial data

Who This Book Is For

If you are an experienced Python developer and wish to get up-to-speed with geospatial programming, then this book is for you. While familiarity with installing third-party Python libraries would be an advantage, no prior knowledge of geospatial programming is required.

What You Will Learn

- Understand the key geospatial concepts and techniques needed to analyze and work with geospatial data
- Learn how to read and write geospatial data from within your Python code
- Use PostGIS to store spatial data and perform spatial queries
- Use Python libraries to analyze and manipulate geospatial data
- Generate maps based on your spatial data
- Implement complete geospatial analysis systems using Python
- Use the Shapely and NetworkX libraries to solve problems such as distance-area calculations, finding the shortest path between two points, buffering polygons, and much more

In Detail

Python is a highly expressive language that makes it easy to write sophisticated programs. Combining high-quality geospatial data with Python geospatial libraries will give you a powerful toolkit for solving a range of geospatial programming tasks.

The book begins with an introduction to geospatial analysis and programming and explains the ideas behind geospatial data. You will explore Python libraries for building your own geospatial applications. You will learn to create a geospatial database for your application using PostGIS and the psycopg2 library, and see how the Mapnik library can be used to create attractive and useful maps.

Finally, you will learn to use the Shapely and NetworkX libraries to create, analyze, and manipulate complex geometric objects, before implementing a system to match GPS recordings against a database of roads to produce a heatmap of the most frequently used roads.

Download and Read Free Online Python GeoSpatial Analysis Essentials Erik Westra

From reader reviews:

Lanita Hill:

Now a day individuals who Living in the era just where everything reachable by interact with the internet and the resources within it can be true or not need people to be aware of each information they get. How individuals to be smart in getting any information nowadays? Of course the answer is reading a book. Examining a book can help folks out of this uncertainty Information mainly this Python GeoSpatial Analysis Essentials book because this book offers you rich details and knowledge. Of course the knowledge in this book hundred % guarantees there is no doubt in it you may already know.

Georgetta Watson:

Hey guys, do you wishes to finds a new book you just read? May be the book with the title Python GeoSpatial Analysis Essentials suitable to you? Often the book was written by well known writer in this era. Typically the book untitled Python GeoSpatial Analysis Essentialsis one of several books that everyone read now. This particular book was inspired a number of people in the world. When you read this book you will enter the new dimension that you ever know before. The author explained their plan in the simple way, thus all of people can easily to be aware of the core of this e-book. This book will give you a large amount of information about this world now. To help you see the represented of the world in this book.

Shalon Dougherty:

Your reading sixth sense will not betray you, why because this Python GeoSpatial Analysis Essentials e-book written by well-known writer we are excited for well how to make book that can be understand by anyone who else read the book. Written inside good manner for you, still dripping wet every ideas and composing skill only for eliminate your own hunger then you still doubt Python GeoSpatial Analysis Essentials as good book not just by the cover but also by the content. This is one e-book that can break don't evaluate book by its protect, so do you still needing a different sixth sense to pick this kind of!? Oh come on your examining sixth sense already said so why you have to listening to a different sixth sense.

John Bergeron:

As we know that book is vital thing to add our information for everything. By a book we can know everything we really wish for. A book is a group of written, printed, illustrated or perhaps blank sheet. Every year seemed to be exactly added. This e-book Python GeoSpatial Analysis Essentials was filled regarding science. Spend your extra time to add your knowledge about your scientific disciplines competence. Some people has several feel when they reading any book. If you know how big good thing about a book, you can feel enjoy to read a guide. In the modern era like at this point, many ways to get book you wanted.

Download and Read Online Python GeoSpatial Analysis Essentials Erik Westra #DYT192OX8GP

Read Python GeoSpatial Analysis Essentials by Erik Westra for online ebook

Python GeoSpatial Analysis Essentials by Erik Westra Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Python GeoSpatial Analysis Essentials by Erik Westra books to read online.

Online Python GeoSpatial Analysis Essentials by Erik Westra ebook PDF download

Python GeoSpatial Analysis Essentials by Erik Westra Doc

Python GeoSpatial Analysis Essentials by Erik Westra Mobipocket

Python GeoSpatial Analysis Essentials by Erik Westra EPub