

Boundless Desktop GIs Software For Mapping Solutions

Get started with QGIS with this introduction covering everything needed to get you going. This tutorial, based on the 3.16 LTR version, introduces you to major concepts and techniques to get you started with viewing data, analysis, and creating maps and reports. With this book you'll learn about: The QGIS interface Creating, editing, and analyzing vector data Working with raster (image) data Using plugins The QGIS Processing Toolbox Georeferencing Creating map and reports Resources for further help and study The book includes a link to all the data you'll need to follow along with each chapter.

This book comprises select proceedings of the International Conference on Smart Technologies for Energy, Environment, and Sustainable Development (ICSTEESD 2018). The chapters are broadly divided into three focus areas, viz. energy, environment, and sustainable development, and discusses the relevance and applications of smart technologies in these fields. A wide variety of topics such as renewable energy, energy conservation and management, energy policy and planning, environmental management, marine environment, green building, smart cities, smart transportation are covered in this book. Researchers and professionals from varied engineering backgrounds contribute chapters with an aim to provide economically viable solutions to sustainable development challenges. The book will prove useful for academics, professionals, and policy makers interested in sustainable development.

This e-book offers an insightful look into the way today's students think about and use technology in their academic and social lives. It will help institutional leaders help their students to become more successful and satisfied.

Provides information on how to create custom maps from tools available over the Internet.

Recent Advances in Computational Optimization

12th International Conference, LSSC 2019, Sozopol, Bulgaria, June 10-14, 2019, Revised Selected Papers

Evolution of Supply Chain Management

Smart Technologies for Energy, Environment and Sustainable Development

Future U.S. Workforce for Geospatial Intelligence

International Conference on Cognitive based Information Processing and Applications (CIPA 2021)

A practical guide to research for architects and designers—now updated and expanded! From searching for the best glass to prevent glare to determining how clients might react to the color choice for restaurant walls, research is a crucial tool that architects must master in order to effectively address the technical, aesthetic, and behavioral issues that arise in their work. This book's unique coverage of research methods is specifically targeted to help professional designers and researchers better conduct and understand research. Part I explores basic research issues and concepts, and includes chapters on relating theory to method and design to research. Part II gives a comprehensive treatment of specific strategies for investigating built forms. In all, the book covers seven types of research, including historical, qualitative, correlational, experimental, simulation, logical argumentation, and case studies and mixed methods. Features new to this edition include: Strategies for investigation, practical examples, and resources for additional information A look at current trends and innovations in research Coverage of design studio-based research that shows how strategies described in the book can be employed in real life A discussion of digital media and online research New and updated examples of research studies A new chapter on the relationship between design and research Architectural Research Methods is an essential reference for architecture students and researchers as well as architects, interior designers, landscape architects, and building product manufacturers.

The latest guide to using QGIS 2.14 to create great maps and perform geoprocessing tasks with ease About This Book Learn how to work with various data and create beautiful maps using this easy-to-follow guide. Give a touch of professionalism to your maps both for functionality and look and feel with the help of this practical guide. A progressive hands-on guide that builds on a geo-spatial data and adds more reactive maps by using geometry tools. Who This Book Is For This book is great for users, developers, and consultants who know the basic functions and processes of GIS and want to learn to use QGIS to analyze geospatial data and create rich mapping applications. If you want to take advantage of the wide range of functionalities that QGIS offers, then this is the book for you. What You Will Learn Install QGIS and get familiar with the user interface Load vector and raster data from files, databases, and web services Create, visualize, and edit spatial data Perform geoprocessing tasks and automate them 4. Create advanced cartographic outputs Design great print maps Expand QGIS using Python In Detail QGIS is a user-friendly open source geographic information system (GIS) that runs on Linux, Unix, Mac OS X, and Windows. The popularity of open source geographic information systems and QGIS in particular has been growing rapidly over the last few years. Learning QGIS Third Edition is a practical, hands-on guide updated for QGIS 2.14 that provides you with clear, step-by-step exercises to help you apply your GIS knowledge to QGIS. Through clear, practical exercises, this book will introduce you to working with QGIS quickly and painlessly. This book takes you from installing and configuring QGIS to handling spatial data to creating great maps. You will learn how to load and visualize existing spatial data and create data from scratch. You will get to know important plugins, perform common geoprocessing and spatial analysis tasks and automate them with Processing. We will cover how to achieve great cartographic output and print maps. Finally, you will learn how to extend QGIS using Python and even create your own plugin. Style and approach A step by step approach to explain concepts of Geospatial map with the help of real life examples

A short book with a lot of hands-on examples to help you learn in a practical way.This book is great for users, developers, and consultants who know the basic functions and processes of a GIS but want to know how to use QGIS to achieve the results they are used to a full-fledged GIS.

This anthology aims to present the fundamental philosophical issues and tools required by the reflection within and upon geography and Geographic Information Systems (GIS) . It is an introduction to the philosophy for GIScience from an analytical perspective, which looks at GIS with a specific focus on its fundamental and most general concepts and distinctions. The first part of the book is devoted to explore some of the main philosophical questions arising from GIS and GIScience, which include, among others, investigations in ontology, epistemology, linguistics and geometrical modeling. The second part concerns issues related to spatial and cartographical representations of the geographical world. The third part is focused on the ontology of geography, specifically in terms of geographical entities, objects and boundaries. Finally, in the fourth part, the topic of GIS constitutes a starting point for exploring themes such as quantum geography and disorientation, and for defining professional profiles for geographers with competences in GIS environment. This book on a new and unexplored field of research could be a fundamental point of reference for professional philosophers and geographers interested in the theoretical reflection about the foundational concepts of GIScience. It is also interesting reading material for students (both undergraduates, postgraduates and Ph.D. students) in philosophy, geography, applied ontology, GIScience, geomatics and computer science.

Environmental Geoinformatics

Learning QGIS 2.0

Geographic Information Systems and Remote Sensing

The Philosophy of GIS

Geospatial Web Services: Advances in Information Interoperability

Taking data from the real world, maps, reports, & other sources, Geographical Information Systems (GIS) synthesize, analyze, & model geographical decision media, providing tools that are revolutionizing urban & regional planning. This valuable introduction to GIS & remote sensing (RS) clearly explains how to take full advantage of this new technology. Thorough enough to offer valuable counsel to those already working with GIS & RS, yet presupposing no knowledge of computing, the book takes readers step by step from the simplest hows & whys all the way to the architecture, implementation, & application of a complete system.

This book constitutes revised papers from the 12th International Conference on Large-Scale Scientific Computing, LSSC 2019, held in Sozopol, Bulgaria, in June 2019. The 70 papers presented in this volume were carefully reviewed and selected from 81 submissions. The book also contains two invited talks. The papers were organized in topical sections named as follows: control and optimization of dynamical systems; meshfree and particle methods; fractional diffusion problems; numerical methods, algorithms and applications; more scalar flow and transport simulation; tensor based algorithms and structures in optimization and applications; HPC and big data: algorithms and applications; large-scale models: numerical methods, parallel computations and applications; monte carlo algorithms; innovative applications in conjunctions with other methods; application of metaheuristics to large-scale problems; large scale machine learning; multiscale algorithms and performance guarantees; and contributed papers.

This book provides a comprehensive discussion on urban growth and sprawl, and how they can be analyzed using remote sensing imageries. It compiles views of numerous researchers that help in understanding the urban growth and sprawl; their patterns, process, causes, consequences, and countermeasures; how remote sensing data and geographic information system techniques can be used in mapping, monitoring, measuring, analyzing, and simulating the urban growth and sprawl and what are the merits and demerits of available methods and models. This book will be of value for the scientists and researchers engaged in urban geographic research, especially using remote sensing imageries. This book will serve as a rigorous literature review for them. Post graduate students of urban geography or urban/regional planning may refer this book as additional studies. This book may help the academicians for preparing lecture notes and delivering lectures. Industry professionals may also be benefited from the discussed methods and models along with numerous citations. Ideal for PC owners looking for an accessible, easy-to-follow reference, this beginner's guide to PC hardware offers expert advice on every component—processors, motherboards, memory, BIOS, CD-ROM and DVD drives, video cards, and much more. You'll also get details on external devices, including monitors, printers, keyboards, and modems. The book covers both Intel and non-Intel CPUs and USB and AGP ports.

Proceedings of ICDAM

Using Open Source GIS Toolkits

Information in Libraries, Archives and Museums

Results of the Workshop on “Computational Optimization” and “Numerical Search and Optimization” 2018

Computers in Libraries

Learning QGIS

This book offers a balance of principles, concepts, and techniques to guide readers toward an understanding of how the World Wide Web can expand and modernize the way you use GIS technology.--[book cover]

This book contains papers presented at the International Conference on Cognitive based Information Processing and Applications (CIPA) held during August 21, 2021, online conference (since COVID 19), which is divided into a 2-volume book. The papers in the second volume represent the various technological advancements

in network information processing, graphics and image processing, medical care, machine learning, smart cities. It caters to postgraduate students, researchers, and practitioners specializing and working in the area of cognitive-inspired computing and information processing.

As Web services have matured in recent years, an increasing number of geospatial Web services designed to deal with spatial information over the network have emerged. Geospatial Web Services: Advances in Information Interoperability provides relevant theoretical frameworks and the latest empirical research findings and applications in the area. This book highlights the strategic role of geospatial Web services in a distributed heterogeneous environment and the life cycle of geospatial Web services for building interoperable geospatial applications.

Many important planning decisions in society and business depend on proper knowledge and a correct understanding of movement, be it in transportation, logistics, biology, or the life sciences. Today the widespread use of mobile phones and technologies like GPS and RFID provides an immense amount of data on location and movement. What is needed are new methods of visualization and algorithmic data analysis that are tightly integrated and complement each other to allow end-users and analysts to extract useful knowledge from these extremely large data volumes. This is exactly the topic of this book. As the authors show, modern visual analytics techniques are ready to tackle the enormous challenges brought about by movement data, and the technology and software needed to exploit them are available today. The authors start by illustrating the different kinds of data available to describe movement, from individual trajectories of single objects to multiple trajectories of many objects, and then proceed to detail a conceptual framework, which provides the basis for a fundamental understanding of movement data. With this basis, they move on to more practical and technical aspects, focusing on how to transform movement data to make it more useful, and on the infrastructure necessary for performing visual analytics in practice. In so doing they demonstrate that visual analytics of movement data can yield exciting insights into the behavior of moving persons and objects, but can also lead to an understanding of the events that transpire when things move. Throughout the book, they use sample applications from various domains and illustrate the examples with graphical depictions of both the interactive displays and the analysis results. In summary, readers will benefit from this detailed description of the state of the art in visual analytics in various ways. Researchers will appreciate the scientific precision involved, software technologists will find essential information on algorithms and systems, and practitioners will profit from readily accessible examples with detailed illustrations for practical purposes.

Practical Internet of Things Security

Monitoring and Management

Open Source Geographic Information System

Analysis of Urban Growth and Sprawl from Remote Sensing Data

Web Mapping Illustrated

FLOSS in Cadastre and Land Registration

There is no doubt that today, perhaps more than ever before, humanity faces a myriad of complex and demanding challenges. These include natural resource depletion and environmental degradation, food and water insecurity, energy shortages, diminishing biodiversity, increasing losses from natural disasters, and climate change with its associated potentially devastating consequences, such as rising sea levels. These human-induced and natural impacts on the environment need to be well understood in order to develop informed policies, decisions, and remedial measures to mitigate current and future negative impacts. To achieve this, continuous monitoring and management of the environment to acquire data that can be soundly and rigorously analyzed to provide information about its current state and changing patterns, and thereby allow predictions of possible future impacts, are essential. Developing pragmatic and sustainable solutions to address these and many other similar challenges requires the use of geodata and the application of geoinformatics. This book presents the concepts and applications of geoinformatics, a multidisciplinary field that has at its core different technologies that support the acquisition, analysis and visualization of geodata for monitoring and management. We depart from the 4D to the 5D data paradigm, which defines geodata accurately, consistently, rapidly and completely, in order to be useful without any temporal restrictions in space, time or scale to represent a truly global dimension of the digital Earth. The book also features the state-of-the-art discussion of Web-GIS. The concepts and applications of geoinformatics presented in this book will be of benefit to decision-makers across a wide range of fields, including those at environmental agencies, in the emergency services, public health and epidemiology, crime mapping, environmental management agencies, tourist industry, market analysis and e-commerce, or mineral exploration, among many others. The title and subtitle of this textbook convey a distinct message. Monitoring -the passive part in the subtitle - refers to observation and data acquisition, whereas management - the active component - stands for operation and performance. The topic is our environment, which is intimately related to geoinformatics. The overall message is: all the mentioned elements do interact and must not be separated. Hans-Peter Bahr, Prof. Dr.-Ing. Dr.h.c., Karlsruhe Institute of Technology (KIT), Germany. In the last half of the twentieth century industry encountered a revolutionary change brought about by the harnessed power of seemingly ever-increasing capacity, speed and functionality of computers and microprocessors. This strength provided management and workers within industries with new capabilities for management, planning and control, design, quality assurance and customer support. Organized information flow became the mainstay of industrial companies. New tools and information technology systems emerged and evolved to enable companies to integrate the various departments (Design, Procurement, Manufacturing, Sales and Finance) within companies, particularly the larger ones, including international corporations. This was to give them a chance to meet new demands for product time to market, just in time supply of orders, and customer support. To the smaller company these changes were not so apparent. Neither the tools nor systems nor indeed their economic value seemed appropriate to them except for special cases. While all this was happening the structure of the larger companies began to disintegrate. Strong competitive pressures and globalization of the market place brought this about. Shedding unwanted costs and services and contracting it to others became common practice. Regional market pressures triggered companies to reorganize to create, produce, and distribute goods and services. Greater dependency on chains of supply from external companies became the norm. Medium and smaller sized companies began to gain some advantage and at the same time some were sucked into management and control systems governed by the larger companies.

Foreword -- Preface -- Lesson 1. Frame the problem and explore the study area -- Lesson 2. Preview the data -- Lesson 3. Choose the data -- Lesson 4. Build the database -- Lesson 5. Edit the data -- Lesson 6. Conduct the analysis -- Lesson 7. Automate the analysis -- Lesson 8. Present your analysis results -- Lesson 9. Share your results online

This book presents new optimization approaches and methods and their application in real-world and industrial problems. Numerous processes and problems in real life and industry can be represented as optimization problems, including modeling physical processes, wildlife, natural hazards and metal nanostructures, workforce planning, wireless network topology, parameter settings for controlling different processes, extracting elements from video clips, and management of cloud computing environments. This book shows how to develop algorithms for these problems, based on new intelligent methods like evolutionary computations, ant colony optimization and constraint programming, and demonstrates how real-world problems arising in engineering, economics and other domains can be formulated as optimization problems.

The book is useful for researchers and practitioners alike.

Geo Info Systems

Architectural Research Methods

PC Mag

Understanding GIS

Select Proceedings of ICGCE 2018

Practical SQL

QGIS is a leading user-friendly, cross-platform, open source, desktop geographic information system (GIS). It provides many useful capabilities and features and their number is continuously growing. More and more private users and companies choose QGIS as their primary GIS software because it is very easy to use, feature-rich, extensible, and has a big and constantly growing community. This book guides you from QGIS installation through data loading, and preparation to performing most common GIS analyses. You will perform different types of GIS analyses including density, visibility, and suitability analysis on practical, real-world data. Finally, you will learn how to become more productive and automate your everyday work with the help of the QGIS Processing framework and by developing your own Python plugins. By the end of this book, you will have all the necessary knowledge about handling and analyzing spatial data.

Cataloging standards practiced within the traditional library, archive and museum environments are not interoperable for the retrieval of objects within the shared online environment. Within today's information environments, library, archive and museum professionals are becoming aware that all information objects can be linked together. In this way, information professionals have the opportunity to collaborate and share data together with the shared online cataloging environment, the end result being improved retrieval effectiveness. But the adaptation has been slow: Libraries, archives and museums are still operating within their own community-specific cataloging practices. This book provides a historical perspective of the evolution of linking devices within the library, archive, and museum environments, and captures current cataloging practices in these fields. It offers suggestions for moving beyond community-specific cataloging principles and thus has the potential of becoming a springboard for further conversation and the sharing of ideas.

We live in a changing world with multiple and evolving threats to national security, including terrorism, asymmetrical warfare (conflicts between agents with different military powers or tactics), and social unrest. Visually depicting and assessing these threats using imagery and other geographically-referenced information is the mission of the National Geospatial-Intelligence Agency (NGA). As the nature of the threat evolves, so do the tools, knowledge, and skills needed to respond. The challenge for NGA is to maintain a workforce that can deal with evolving threats to national security, ongoing scientific and technological advances, and changing skills and expectations of workers. Future U.S. Workforce for Geospatial Intelligence assesses the supply of expertise in 10 geospatial intelligence (GEOINT) fields, including 5 traditional areas (geodesy and geophysics, photogrammetry, remote sensing, cartographic science, and geographic information systems and geospatial analysis) and 5 emerging areas that could improve geographic intelligence (GEOINT fusion, crowdsourcing, human geography, visual analytics, and forecasting). The report also identifies gaps in expertise relative to NGA's needs and suggests ways to ensure an adequate supply of geospatial intelligence expertise over the next 20 years.

Maps and atlases are created as soon as information on our geography has been clarified. They are used to find directions or to get insight into spatial relations. They are produced and used both on paper as well as on-screen. The Web is the new medium for spreading and using maps. This book explains the benefits of this medium from the perspective of the user, and the map provider. Opportunities and pitfalls are treated by a set of case-studies. A website accompanies the book and provides a dynamic environment for demonstrating many of the principles set out in the text, including access to a basic course in Internet cartography as well as links to other interesting places on the Web. Professor Kraak looks at basic questions such as "I have this data what can I do with it?" and discusses the various functions of maps on the web. Web Cartography also looks at the particularities of multidimensional web maps and addresses topics such as map contents (colour, text and symbols), map physics (size and resolution), and the map environment (interface design/site contents).

Symbiosis of Adaptive Value Networks and ICT

PC Hardware: A Beginner's Guide

Large-Scale Scientific Computing

Visual Analytics of Movement

Geoprocessing with Python

Web Cartography

PostGIS in Action, Third Edition shows you how to solve real-world geodata problems. You'll go beyond basic mapping, and explore custom functions for your applications. Summary In PostGIS in Action, Third Edition you will learn: An introduction to spatial databases Geometry, geography, raster, and topology spatial types, functions, and queries Applying PostGIS to real-world problems Extending PostGIS to web and desktop applications Querying data from external sources Querying data from external sources PostgresSQL Foreign Data Wrappers Optimizing queries for maximum speed Simplifying geometries for greater efficiency PostGIS in Action, Third Edition teaches readers of all levels to write spatial queries for PostgreSQL. You'll start by exploring vector-, raster-, and topology-based GIS before quickly progressing to analyzing, viewing, and mapping data. This fully updated third edition covers key changes in PostGIS 3.1 and PostgreSQL 13, including parallelization support, partitioned tables, and new JSON functions that help in creating web mapping applications. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology PostGIS is a spatial database extender for PostgreSQL. It offers the features and firepower you need to take on nearly any geodata task. PostGIS lets you create location-aware que with a few lines of SQL code, then build the backend for mapping, raster analysis, or routing application with minimal effort. About the book PostGIS in Action, Third Edition shows you how to solve real-world geodata problems. You'll go beyond basic mapping, and explore custom functions for your applications. Inside this fully updated edition, you'll find coverage of new PostGIS features such as PostGIS Window functions, parallelization of queries, and outputting data for applications using JSON and Vector Tile functions. What's inside Fully revised for PostGIS version 3.1 and PostgreSQL 13 Optimize queries for maximum speed Simplify geometries for greater efficiency Extend PostGIS to web and desktop applications About the reader For readers familiar with relational databases and basic SQL. No prior geodata or GIS experience required. About the author Regina Be and Leo Hsu are database consultants and authors. Regina is a member of the PostGIS core development team and the Project Steering Committee. Table of Contents PART 1 INTRODUCTION TO POSTGIS 1 What is a spatial database? 2 Spatial data types 3 Spatial reference systems 4 Working with real data 5 Using PostGIS on the desktop 6 Geometry and geography functions 7 Raster functions 8 Spatial relationships PART 2 PUTTING POSTGIS TO WORK 9 Proximity analysis 10 PostGIS TIGER geocoder 11 Geometry and geography processing 12 Raster processing 13 Building and using topologies 14 Organizing spatial data 15 Query performance tuning PART 3 USING POSTGIS WITH OTHER TOOLS 16 Extending PostGIS with pgRouting and procedural languages 17 Using PostGIS in web applications Practical SQL is an approachable and fast-paced guide to SQL (Structured Query Language), the standard programming language for defining, organizing, and exploring data in relational databases. The book focuses on using SQL to find the story your data tells, with the popular open-source database PostgreSQL and the pgAdmin interface as its primary tools. You'll first cover the fundamentals of databases and the SQL language, then build skills by analyzing data from the U.S. Census and other federal and state government agencies. With exercises and real-world examples in each chapter, this book will teach even those who have never programmed before all the tools necessary to build powerful databases and access information quickly and efficiently. You'll learn how to - Create databases and related tables using your own data - Define the right data types for your information - Aggregate, sort, and filter data to find patterns - Use basic math and advanced statistical functions - Identify errors in data clean them up - Import and export data using delimited text files - Write queries for geographic information systems (GIS) - Create advanced queries and automate tasks Learning SQL doesn't have to be dry and complicated. Practical SQL delivers clear examples with an easy-to-follow approach to teach you the tools you need to build and manage your own databases. This book uses PostgreSQL, but the SQL syntax is applicable to many database applications, including Microsoft SQL Server and MySQL.

This book comprises select proceedings of the First International Conference on Geomatics in Civil Engineering (ICGCE 2018). This book presents latest research on applications of geomatics engineering in different domains of civil engineering, like structural engineering, geotechnical engineering, hydraulic and water resources engineering, environmental engineering and transportation engineering. It also covers miscellaneous applications of geomatics in a wide range of technical and societal problems making use of geospatial information, engineering principles, and relational data structures involving measurement sciences. The book proves to be very useful for the scientific and engineering community working in the field of geomatics and geospatial technology.

This book includes original unpublished contributions presented at the International Conference on Data Analytics and Management (ICDAM 2020), held at Jan Wyzkowski University, Poland, during June 2020. The book covers the topics in data analytics, data management, big data, computational intelligence, and communication networks. The book presents innovative work by leading academics, researchers, and experts from industry which is useful for young researchers and students.

The Independent Guide to IBM-standard Personal Computing

Volume 2

Web GIS

Educating the Net Generation

Geospatial Techniques in Urban Hazard and Disaster Analysis

Mergent Moody's Industrial Manual

PCMag.com is a leading authority on technology, delivering Labs-based, independent reviews of the latest products and services. Our expert industry analysis and practical solutions help you make better buying decisions and get more from technology.

A practical, indispensable security guide that will navigate you through the complex realm of securely building and deploying systems in our IoT-connected world About This Book Learn to design and implement cyber security strategies for your organization Learn to protect cyber-physical systems and utilize forensic data analysis to beat vulnerabilities in your IoT ecosystem Learn best practices to secure your data from device to the cloud Gain insight into privacy-enhancing techniques and technologies Who This Book Is For This book targets IT Security Professionals and Security Engineers (including pentesters, security architects and ethical hackers) who would like to ensure security of their organization's data when connected through the IoT. Business analysts and managers will also find it useful. What You Will Learn Learn how to break down cross-industry barriers by adopting the best practices for IoT deployments Build a rock-solid security program for IoT that is cost-effective and easy to maintain Demystify complex topics such as cryptography, privacy, and penetration testing to improve your security posture See how the selection of individual components can affect the security posture of the entire system Use Systems Security Engineering and Privacy-by-design principles to design a secure IoT ecosystem Get to know how to leverage the burgeoning cloud-based systems that will support the IoT into the future. In Detail With the advent of Internet of Things (IoT), businesses will be faced with defending against new types of threats. The business ecosystem now includes cloud computing infrastructure, mobile and fixed endpoints that open up new attack surfaces, a desire to share information with many stakeholders and a need to take action quickly based on large quantities of collected data. It therefore becomes critical to ensure that cyber security threats are contained to a minimum when implementing new IoT services and solutions. The interconnectivity of people, devices, and companies raises stakes to a new level as computing and action become even more mobile, everything becomes connected to the cloud, and infrastructure is strained to securely manage the billions of devices that will connect us all to the IoT. This book shows you how to implement cyber-security solutions, IoT design best practices and risk mitigation methodologies to address device and infrastructure threats to IoT solutions. This book will take readers on a journey that begins with understanding the IoT and how it can be applied in various industries, goes on to describe the security challenges associated with the IoT, and then provides a set of guidelines to architect and deploy a secure IoT in your Enterprise. The book will showcase how the IoT is implemented in early-adopting industries and describe how lessons can be learned and shared across diverse industries to support a secure IoT. Style and approach This book aims to educate readers on key areas in IoT security. It walks readers through engaging with security challenges and then provides answers on how to successfully manage IoT security and build a safe infrastructure for the smart devices. After reading this book, you will understand the true potential of tools and solutions in order to build real-time security intelligence on IoT networks.

Recent Advances in Computational OptimizationResults of the Workshop on “Computational Optimization” and “Numerical Search and Optimization” 2018Springer Summary Geoprocessing with Python teaches you how to use the Python programming language, along with free and open source tools, to read, write, and process geospatial data. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology This book is about the science of reading, analyzing, and presenting geospatial data programmatically, using Python. Thanks to dozens of open source Python libraries and tools, you can take on professional geoprocessing tasks without investing in expensive proprietary packages like ArcGIS and MapInfo. The book shows you how. About the Book Geoprocessing with Python teaches you how to access available datasets to make maps or perform your own analyses using free tools like the GDAL, NumPy, and matplotlib Python modules. Through lots of hands-on examples, you'll master core practices like handling multiple vector file formats, editing geometries, applying spatial and attribute filters, working with projections, and performing basic analyses on vector data. The book also covers how to manipulate, resample, and analyze raster data, such as aerial photographs and digital elevation models. What's Inside Geoprocessing from the ground up Read, write, process, and analyze raster data Visualize data with matplotlib Write custom geoprocessing tools Three additional appendices available online About the Reader To read this book all you need is a basic knowledge of Python or a similar programming language. About the Author Chris Garrard works as a developer for Utah State University and teaches a graduate course on Python programming for GIS. Table of Contents Introduction Python basics Reading and writing vector data Working with different vector file formats Filtering data with OGR Manipulating geometries with OGR Vector analysis with OGR Using spatial reference systems Reading and writing raster data Working with raster data

Select Proceedings of ICSTEESD 2018

An ArcGIS Pro Project Workbook

Applications of Geomatics in Civil Engineering

Principles and Applications

A Beginner's Guide to Storytelling with Data

ACSIM Bulletin

This book is the second in a series that examines how geographic information te- nologies (GIT) are being implemented to improve our understanding of a variety of hazard and disaster situations. The main types of technologies covered under the umbrella of GIT, as used in this volume, are geographic information systems, remote sensing (not including ground-penetrating or underwater systems), and global po- tioning systems. Our focus is on urban areas, broadly de ned in order to encompass rapidly growing and densely populated areas that may not be considered "urban" in the conventional sense. The material presented here is also unabashedly applied – our goal is to provide GIT tools to those seeking more ef cient ways to respond to, recover from, mitigate, prevent, and/or model hazard and disaster events in urban settings. Therefore, this book was created not only with our colleagues in the academic world in mind, but also for hazards professionals and practitioners. We also believe graduate students will nd the material presented here of interest, as may upper division undergraduate students.

Computer Mapping

Opportunities and Risks

Introduction to QGIS

Advances in Information Interoperability

Data Analytics and Management

How to Publish Data