Arcgis Web Development

#ArcGIS web development #GIS web applications #Esri JavaScript API #Geospatial web development #Interactive mapping solutions

Unlock the power of location with expert ArcGIS web development. We specialize in creating dynamic and user-friendly GIS web applications, leveraging the Esri JavaScript API to build robust geospatial web solutions. Deliver engaging interactive mapping solutions that transform complex data into actionable insights for your audience.

ArcGIS Web Development

Summary ArcGIS Web Development is an example-rich tutorial designed to teach developers to use the ArcGIS JavaScript API to build custom GIS web applications. About the Technology Now you can unshackle your GIS application from a workstation! Using the ArcGIS JavaScript API, developers can build mobile and web-based maps and applications driven by ArcGIS data and functionality. Experienced ArcGIS developers will find that the familiar development environment provides a smooth transition to the web. Web developers new to GIS will be pleased by how easily they can apply their existing skills to GIS applications. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Book ArcGIS Web Development is an example-rich guide that teaches you to use the ArcGIS JavaScript API to build custom GIS web applications. The book begins with easy-to-follow examples that introduce readers to the ArcGIS JavaScript API and show how you can apply simple customizations. As the book progresses, you'll explore a full-scale, web-mapping application. By the end you will be able to build web apps that have features you'd ordinarily expect to find only in dedicated GIS applications. Written for web developers familiar with JavaScript and basic GIS concepts. Experience with ArcGIS is helpful, but not necessary. What's Inside Build web-based GIS applications Customize the ArcGIS Javascript API tools Bring ArcGIS data to the web Create secure logins for mobile app users About the Author Rene Rubalcava is the cofounder of SmartGeoTech, Inc., a GIS development company specializing in Esri technologies. Table of Contents PART 1 ARCGIS JAVASCRIPT FOUNDATION GIS as a tool Introducing core API concepts Working with the REST API PART 2 SAMPLE USE CASE Building an application Developing a custom data-collection application Building a desktop browser application Advanced techniques APPENDICES Setting up your environment Dojo basics Configuring a proxy

Introducing ArcGIS API 4 for JavaScript

Learn to use the ArcGIS API 4 for JavaScript to build custom web mapping applications. This book teaches you to easily create interactive displays of geographic information that you can use to tell

stories and answer questions. Version 4 of the ArcGIS API for JavaScript introduces new patterns and fundamental concepts, including 3D mapping capabilities. You will learn the fundamentals of using the API in order to get the most out of it. Covering key concepts and how different components work together, you will also learn how to take advantage of the Widget framework built into the API to build your own reusable widgets for your own ArcGIS JSAPI applications. Including a series of samples you can use to leverage the API for your own applications, Introducing ArcGIS API 4 for JavaScript helps you take your existing knowledge of JavaScript to a new level, and add new features to your app libraries. What You'll Learn Create both 2D and 3D custom web mapping applications Work with popups and custom widgets Leverage the ArcGIS platform in your applications Utilize custom visualizations Who This Book Is For Developers who need to learn the ArcGIS JSAPI for work or school. Those with some JavaScript experience; GIS or mapping experience is not required.

Developing Mobile Web ArcGIS Applications

This guide is invaluable to those just starting out with GIS development but will also benefit GIS professionals wishing to expand their development skills to include mobile apps.

Building Web Applications with ArcGIS

If you are a GIS user or a web programmer, this book is for you. This book is also intended for all those who have basic web development knowledge with no prior experience of ArcGIS and are keen on venturing into the world of ArcGIS technology. The book will equip you with the skills to comfortably start your own ArcGIS web development project.

ArcGIS for JavaScript Developers by Example

A practical guide to get you creating powerful mapping applications using the rich set of features provided by the ArcGIS JavaScript APIAbout This Book- Unshackle your GIS application from a workstation! Get running with three major web mapping projects covering all the important aspects of the ArcGIS JavaScript API.- Set a strong foundation for the ArcGIS JavaScript API and modular coding with dojo.- Gain a crystal clear understanding of the ArcGIS JavaScript, and become skilled in creating exciting and interesting geospatial apps.Who This Book Is ForThis book is for JavaScript developers who wish to develop amazing mapping applications using the rich set of features provided by the ArcGIS JavaScript API, but more than that, a spatial frame of mind will help a long way.What You Will Learn- Find out what you need to develop a web mapping application in the ArcGIS environment- Get to know about the major features provided by the ArcGIS JavaScript API- See the coding best practices to develop modular dojo-based JavaScript applications- Get to grips with writing custom re-usable dojo modules using dojo and esri modules and dijits- Understand how to use various ArcGIS data sources and other open geospatial data available on the web- Discover how to query spatial data and get the best out of your data using analytical techniques- Master the art of rendering your map beautifully and create wonderful data visualizations using non-map objects such as charts- Grasp how to create secure and scalable web mapsIn DetailThe book starts by explaining the basics of the ArcGIS web mapping ecosystem. The book walks you through the development of six major applications, covering a wide variety of topics such as querying, rendering, advanced data visualization and performing map analytics. It also emphasizes on writing modular code using pure dojo, which is the preferred platform for developing web GIS applications using ArcGIS JavaScript API.By the end of the book, you will have gained enough practical experience to architect a robust and visually powerful mapping application using the API. Style and approach This is a practical, hands-on guide on using the ArcGIS JavaScript API to develop mapping applications. It is packed with three progressively challenging and diverse projects that explain the plethora of API and dojo topics.

Mastering ArcGIS Server Development with JavaScript

Transform maps and raw data into full-fledged web mapping applications using the power of the ArcGIS JavaScript API and JavaScript libraries About This Book Create and share modern map applications for desktops, tablets, and mobile browsers Present and edit geographic and related data through maps, charts, graphs, and more Learn the tools, tips, and tricks made available through the API and related libraries with examples of real-world applications Who This Book Is For This book is intended for intermediate developers who want to design web mapping applications. You should have some experience with geographic information systems, especially with ArcGIS products such as ArcGIS Server. It also helps to have some experience with HTML, CSS, and JavaScript. What You Will Learn

Create single-page mapping applications, lining up data from different sources Search for and display geographic and tabular information based on locations and attributes Customize maps and widgets to deliver the best user experience Present location data intuitively using charts and graphs Integrate mapping applications with your favorite JavaScript frameworks Test the working of your web map application and take advantage of cloud services such as ArcGIS Online Create modern-looking web maps through styling tips and tricks In Detail ESRI and its ArcGIS line of software have been an industry leader in digital map production and publication for over 30 years. ArcGIS Server lets you design, configure, and publish maps that can be viewed and edited through the Internet. After designing basic maps, you may want to find out new and innovative ways to represent information using these maps. In this book, you'll work through practical examples, experiencing the pitfalls and successes of creating desktop and mobile map applications for a web browser using the ArcGIS Server platform. The book begins by introducing you to ArcGIS Server and ESRI's JavaScript API. You'll work with your first web map and then move on to learn about ESRI's building blocks. A Dojo AMS style widget will help you create your own widgets for a map and then see how to collect geographic data. Furthermore, you will learn different techniques such as using Dojo Charts to create charts and graphs to represent your data. Then you will see how to use ESRI JavaScript API with other JavaScript libraries and different styling methods to make your map stand out. By the end of the book, you will discover how to make your application compatible with different devices and platforms and test it using testing libraries. Style and approach An in-depth guide that explores web application development using ArcGIS Server and the ArcGIS JavaScript API. Topics are explained in the context of developing two applications for fictional clients. Details of application development, including possible pitfalls and best practices, are included in this book.

Building Web and Mobile ArcGIS Server Applications with JavaScript

Master the ArcGIS API for JavaScript to build web and mobile applications using this practical guide. About This Book Develop ArcGIS Server applications with JavaScript, both for traditional web browsers as well as the mobile platform Make your maps informative with intuitive geographic layers, user interface widgets, and more Integrate ArcGIS content into your custom applications and perform analytics with the ArcGIS Online Who This Book Is For If you are a web or mobile application developer, who wants to create GIS applications in your respective platform, this book is ideal for you. You will need Java Script programming experience to get the most out of this book. Although designed as an introductory to intermediate level book, it will also be useful for more advanced developers who are new to the topic of developing applications with ArcGIS Server. What You Will Learn To create an application with the ArcGIS API for JavaScript Build and display a broad range of different geometry types to represent features on the map The best way to leverage a feature layer and display related attribute data The functionality of the wide range of widgets and how to use them effectively Query data to gain new insights into the information it contains Work with tasks to discover and locate features on the map Using the geocoder and associated widgets The ability of the API to provide turn by turn directions and routing capabilities How to use the Geometry Engine and Geometry Service tasks for common geoprocessing operations Integrate content on ArcGIS online and add it to your custom web mapping application In Detail The ArcGIS API for JavaScript enables you to quickly build web and mobile mapping applications that include sophisticated GIS capabilities, yet are easy and intuitive for the user. Aimed at both new and experienced web developers, this practical guide gives you everything you need to get started with the API. After a brief introduction to HTML/CSS/JavaScript, you'll embed maps in a web page, add the tiled, dynamic, and streaming data layers that your users will interact with, and mark up the map with graphics. You will learn how to quickly incorporate a broad range of useful user interface elements and GIS functionality to your application with minimal effort using prebuilt widgets. As the book progresses, you will discover and use the task framework to query layers with spatial and attribute criteria, search for and identify features on the map, geocode addresses, perform network analysis and routing, and add custom geoprocessing operations. Along the way, we cover exciting new features such as the client-side geometry engine, learn how to integrate content from ArcGIS.com, and use your new skills to build mobile web mapping applications. We conclude with a look at version 4 of the ArcGIS API for JavaScript (which is being developed in parallel with version 3.x) and what it means for you as a developer. Style and approach Readers will be taken through a series of exercises that will demonstrate how to efficiently build ArcGIS Server applications for the mobile and web.

Building Web and Mobile ArcGIS Server Applications with JavaScript

Master the ArcGIS API for JavaScript to build web and mobile applications using this practical guide.About This Book* Develop ArcGIS Server applications with JavaScript, both for traditional web browsers as well as the mobile platform* Make your maps informative with intuitive geographic layers, user interface widgets, and more* Integrate ArcGIS content into your custom applications and perform analytics with the ArcGIS OnlineWho This Book Is ForIf you are a web or mobile application developer, who wants to create GIS applications in your respective platform, this book is ideal for you. You will need Java Script programming experience to get the most out of this book. Although designed as an introductory to intermediate level book, it will also be useful for more advanced developers who are new to the topic of developing applications with ArcGIS Server.What You Will Learn* To create an application with the ArcGIS API for JavaScript* Build and display a broad range of different geometry types to represent features on the map* The best way to leverage a feature layer and display related attribute data* The functionality of the wide range of widgets and how to use them effectively* Query data to gain new insights into the information it contains* Work with tasks to discover and locate features on the map* Using the geocoder and associated widgets* The ability of the API to provide turn by turn directions and routing capabilities* How to use the Geometry Engine and Geometry Service tasks for common geoprocessing operations* Integrate content on ArcGIS online and add it to your custom web mapping applicationIn DetailThe ArcGIS API for JavaScript enables you to quickly build web and mobile mapping applications that include sophisticated GIS capabilities, yet are easy and intuitive for the user.Aimed at both new and experienced web developers, this practical guide gives you everything you need to get started with the API. After a brief introduction to HTML/CSS/JavaScript, you'll embed maps in a web page, add the tiled, dynamic, and streaming data layers that your users will interact with, and mark up the map with graphics. You will learn how to quickly incorporate a broad range of useful user interface elements and GIS functionality to your application with minimal effort using prebuilt widgets. As the book progresses, you will discover and use the task framework to query layers with spatial and attribute criteria, search for and identify features on the map, geocode addresses, perform network analysis and routing, and add custom geoprocessing operations. Along the way, we cover exciting new features such as the client-side geometry engine, learn how to integrate content from ArcGIS.com, and use your new skills to build mobile web mapping applications.We conclude with a look at version 4 of the ArcGIS API for JavaScript (which is being developed in parallel with version 3.x) and what it means for you as a developer.Style and approachReaders will be taken through a series of exercises that will demonstrate how to efficiently build ArcGIS Server applications for the mobile and web.

Building Web and Mobile ArcGIS Server Applications with JavaScript - Second Edition

This book is written in a helpful, practical style with numerous hands-on recipes and chapters to help you save time and effort by using Python to power ArcGIS to create shortcuts, scripts, tools, and customizations."Programming ArcGIS 10.1 with Python Cookbook" is written for GIS professionals who wish to revolutionize their ArcGIS workflow with Python. Basic Python or programming knowledge is essential(?).

Programming ArcGIS 10.1 with Python Cookbook

"Bringing location to web applications"--Cover.

HTML5 Geolocation

This book provides a general overview of building and deploying sophisticated custom applications and solutions using ArcGIS Server. ArcGIS Server is a platform for building enterprise GIS applications that are centrally managed, support multiple users, include advanced GIS functionality, and are built using industry standards. ArcGIS Server provides the framework for developers to create focused GIS Web applications and services that can be utilized by clients, including browser-based applications, ArcGIS Engine applications, and ArcGIS DesktopproductsArcInfo, ArcEditor, and ArcView. The entire ArcGIS system is builtwith and extended by software components called ArcObjects, which are at the core of all ArcGIS products. Server administrators who manage an ArcGIS Server system will find this volume useful. The book also includes several scenarios illustrating different types of applications that can be developed using ArcGIS Server.

ArcGIS 9

This book is intended for intermediate developers who want to design web mapping applications. You should have some experience with geographic information systems, especially with ArcGIS products such as ArcGIS Server. It also helps to have some experience with HTML, CSS, and JavaScript.After designing basic maps, you may want to find out new and innovative ways to represent information using these maps. In this book, you'll work through practical examples, experiencing the pitfalls and successes of creating desktop and mobile map applications for a web browser using the ArcGIS Server platform.

Advance Arcgis Server Development With Javascript

Get the latest information about online GIS using ArcGIS(R) apps and functionality with Getting to Know Web GIS, fifth edition.

Getting to Know Web GIS

Explore the robust features of Python to create real-world ArcGIS applications through exciting, hands-on projects About This Book Get to grips with the big world of Python add-ins and wxPython in GUI development to implement their features in your application Integrate advanced Python libraries, ArcPy mapping, and data access module techniques to develop a mapping application Construct a top-notch intermediate-to-advanced project by accessing ArcGIS Server and ArcGIS Online resources through the ArcGIS REST API using a project-based approach Who This Book Is For If you have prior experience building simple apps with ArcGIS and now have a fancy for developing a more challenging and complex desktop application in ArcGIS, then this book is ideal for you. What You Will Learn Automate the creation of creative output data visualizations including maps, charts, and graphs Explore ways to use the ArcPy Mapping module and Data-driven Pages to automate the creation of map books in your own project Develop applications that use the Plotly platform and library to create stunning charts and graphs that can be integrated into ArcGIS Desktop Build tools that access REST services and download data to a local geodatabase Design, build, and integrate advanced GUIs with wxPython and ArcGIS Desktop in ArcGIS Get clued up about constructing applications that export data to Google Earth Pro to automate time-consuming complex processes Maximize the access of ArcGIS Server and ArcGIS Online using the ArcGIS REST API with Python In Detail This book is an immersive guide to take your ArcGIS Desktop application development skills to the next level It starts off by providing detailed description and examples of how to create ArcGIS Desktop Python toolboxes that will serve as containers for many of the applications that you will build. We provide several practical projects that involve building a local area/community map and extracting wildfire data. You will then learn how to build tools that can access data from ArcGIS Server using the ArcGIS REST API. Furthermore, we deal with the integration of additional open source Python libraries into your applications, which will help you chart and graph advanced GUI development; read and write JSON, CSV, and XML format data sources; write outputs to Google Earth Pro, and more. Along the way, you will be introduced to advanced ArcPy Mapping and ArcPy Data Access module techniques and use data-driven Pages to automate the creation of map books. Finally, you will learn advanced techniques to work with video and social media feeds. By the end of the book, you will have your own desktop application without having spent too much time learning sophisticated theory. Style and approach This is an easy-to-follow, project-based guide that guides you through the whole ArcGIS theme with practical, real-world examples and a systematic approach.

ArcGIS Blueprints

Python Scripting for ArcGIS Pro is the definitive, easy-to-follow guide to writing useful Python code with spatial data in ArcGIS Pro, whether you're new to programming or not.

Python Scripting for Arcgis Pro

Get the very most out of the ArcGIS for Desktop productsthrough ArcObjects and .NET ArcGIS for Desktop is a powerful suite of software tools forcreating and using maps, compiling, analyzing and sharinggeographic information, using maps and geographic information inapplications, and managing geographic databases. But getting thehang of ArcGIS for Desktop can be a bit tricky, even forexperienced programmers. Core components of ArcGIS platform iscalled ArcObjects. This book first introduce you the whole ArcGISplatform and the opportunities for development using variousprogramming languages. Then it focuses on ArcGIS for Desktopapplications and makes you familiar with ArcObjects from .NET pointof view. Whether you are an ArcGIS user with no background inprogramming or a

programmer without experience with the ArcGISplatform, this book arms you with everything you need to get goingwith ArcGIS for Desktop development using .NET?right away. Writtenby a leading expert in geospatial information system design anddevelopment, it provides concise, step-by-step guidance,illustrated with best-practices examples, along with plenty ofready-to-use source code. In no time you?ll progress from .NETprogramming basics to understanding the full suite of ArcGIS toolsand artefacts to customising and building your own commands, toolsand extensions?all the way through application deployment. Among other things, you?ll learn to: Object-Oriented and Interface-based programming in .NET (C# andVB.NET) Finding relationship between classes and interfaces usingobject model diagrams Querying data Visualizing geographical data using various rendering Creating various kinds of Desktop Add-Ins Performing foreground and background geoprocessing Learn how to improve your productivity with ArcGIS forDesktop and Beginning ArcGIS for Desktop Development Using.NET

Beginning ArcGIS for Desktop Development using .NET

An easy to follow tutorial, this book uses a step-by-step approach with exercises designed to give you hands-on experience with this technology. If you are a web or mobile application developer, who wants to create GIS applications in your respective platform, this book is ideal for you. You will need Java Script programming experience to get the most out of this book. Although designed as an introductory to intermediate level book, it will also be useful for more advanced developers who are new to the topic of developing applications with ArcGIS Server.

Building Web and Mobile ArcGIS Server Applications with JavaScript

Build a web mapping application from scratch using ArcGIS Javascript API and ArcGIS Online. You will build an app that helps users locate landmarks. The app shows the landmarks in a map such as libraries, cafes, restaurants schools and much more. It has a search capability to search for landmarks where they will be highlighted on the map. It also shows the nearby landmarks within specific miles from current location. So you can answer interesting questions such as show me all libraries within 100 feet of this coffee shop or are there any liquor stores within a mile from this school? I will be providing you with the sample data which I created myself, this data is not real it is just sample. All we need is to write the application. The app will run on both mobile and desktop. Whom this book is written for?Anyone interested in learning how to build a web mapping application. Basic programming knowledge is recommended but not required. I will explain all that is required as we go through the book.System RequirementsI designed this book in a way so you don't require a special or license to get started. I will be using a mac in this book but will include instructions for Windows and Linux. We will use ArcGIS Online free account to host our landmark data and ArcGIS Javascript API 4.x to write the web application. I will provide that data in GeoJSON format so we can upload it to ArcGIS Online.Software RequirementsAll you need on your machine is a text editor to write code and a web server to serve the static files. I will be using Node JS as a web server and Visual Studio Code as the text editor. We will take care of the download and installation of those two in chapter

Learn GIS Programming with Arcgis for JavaScript API 4.X and Arcgis Online: Learn GIS Programming by Building an Engaging Web Map Application, Works O

Tackle complex spatial data tasks effortlessly with this easy-to-follow guide to writing specialized Python scripts and developing tools for spatial data in ArcGIS(R) Pro. Intended for users who have a good foundation in Python, this book explores how to develop scripts into tools and notebooks to share with others, use third-party packages, and master other more specialized tasks. By the end of this book, you'll be confident in writing more advanced scripts, developing them into tools and notebooks, and sharing with others. Helpful points to remember, key terms, and review questions are included at the end of each chapter to reinforce your understanding of Python. Companion data and tutorials are available online. Advanced Python Scripting for ArcGIS Pro follows on the topics explained in Python Scripting for ArcGIS Pro (Esri Press, 2024) and is now updated for ArcGIS Pro 3.2. Packed with advanced techniques and practical examples, Advanced Python Scripting for ArcGIS Pro is perfect for more experienced ArcGIS Pro users who are looking to upgrade their Python skills and enhance their workflows. Dr. Paul A. Zandbergen is a professor in the GIS program at Vancouver Island University. His research focuses on the robustness of spatial analytical techniques in crime analysis, environmental science, public health, spatial ecology, and water resources. His research has been funded by the National Science Foundation, the National Institute of Justice, and the National Institutes of Health. In

addition to this book and Python Scripting for ArcGIS, he has published over 50 journal articles and book chapters. He lives with his family in Vancouver, British Columbia, Canada.

Advanced Python Scripting for ArcGIS Pro

With this book readers can become real geographic programmers using the Java programming language. They will find working code examples in Java using some of the many GIS-oriented applications and APIs, and be able to display GIS data on the Web, manipulate GIS data, and programmatically store and retrieve it in geographically enabled databases.

GIS for Web Developers

Pattern Analysis and cluster mapping made easy About This Book Analyze patterns, clusters, and spatial relationships using ArcGIS tools Get up to speed in R programming to create custom tools for analysis Sift through tons of crime and real estate data and analyze it using the tools built in the book Who This Book Is For This book is for ArcGIS developers who want to perform complex geographic analysis through the use of spatial statistics tools including ArcGIS and R. No knowledge of R is assumed. What You Will Learn Get to know how to measure geographic distributions Perform clustering analysis including hot spot and outlier analysis Conduct data conversion tasks using the Utilities toolset Understand how to use the tools provided by the Mapping Clusters toolset in the Spatial Statistics Toolbox Get to grips with the basics of R for performing spatial statistical programming Create custom ArcGIS tools with R and ArcGIS Bridge Understand the application of Spatial Statistics tools and the R programming language through case studies In Detail Spatial statistics has the potential to provide insight that is not otherwise available through traditional GIS tools. This book is designed to introduce you to the use of spatial statistics so you can solve complex geographic analysis. The book begins by introducing you to the many spatial statistics tools available in ArcGIS. You will learn how to analyze patterns, map clusters, and model spatial relationships with these tools. Further on, you will explore how to extend the spatial statistics tools currently available in ArcGIS, and use the R programming language to create custom tools in ArcGIS through the ArcGIS Bridge using real-world examples. At the end of the book, you will be presented with two exciting case studies where you will be able to practically apply all your learning to analyze and gain insights into real estate data. Style and approach Filled with live examples that you can code along with, this book will show you different methods and techniques to effectively analyze spatial data with ArcGIS and the R language. The exciting case studies at the end will help you immediately put your learning to practice.

Spatial Analytics with ArcGIS

The book kicks off with the fundamentals of starting to use Python with ArcGIS, followed by recipes on managing map documents and layers, including how to find and fix broken data links in these files. In the second part of the book, you will learn to create custom geoprocessing tools and how to use the Attribute and Location tools to select specific features. The third part of the book covers topics for advanced users including the REST API, and also teaches you how to use Python with ArcGIS Pro. The book finishes with appendices covering how to automate Python scripts, and the five things that should be at the back of every GIS programmer's mind.

Programming ArcGIS with Python Cookbook

Develop three engaging ArcGIS applications to address your real-world mapping scenarios About This Book Design, build and run ArcGIS applications using ArcObjects SDK Extend ArcGIS objects and use add -ins to deploy applications on top of ArcGIS An example-centric practical guide to help you understand mapping scenarios with ArcGIS Who This Book Is For If you are an application developer and wish to enhance your skills for the GIS domain with ArcGIS, then this book is for you. Previous experience with ArcGIS is not required. What You Will Learn Use essential ArcGIS code to query geodatabases Communicate with ArcGIS maps, with the help of critical designing and optimisation tips Highlight and interact with objects on your map Query ArcGIS geodatabases with related data to display your information on ArcGIS Edit your underlying geodatabase Explore strategies for the adaptation of various types of spatial analysis techniques into the GIS framework Analyze tools for Geographical Information Systems and remote sensing Experience ArcGIS's advanced tools for manipulation of shapefiles and geodatabases In Detail ArcGIS is a geographic information system (GIS) for working with maps and geographic information. It is considered the turnkey solution to creating and sharing interactive maps. ArcGIS is designed to work the way you work. With nothing to install and

set up, ArcGIS helps you make your work productive from day one. The book covers the design and development of three ArcGIS applications to guide the readers in crafting their own GIS solution as per their requirements. The book begins by giving you a refresher on the concepts of ArcGIS. Without wasting any time, you'll begin with developing your first ArcGIS application. You will be developing a cell tower analysis tool. Following this, you will be guided through mapping signal strength and real - time manoeuvring in your GIS system. You will then move on to the second application of the book: a restaurant mapping system. The application will allow tourists to browse restaurants on a map, according to their preferences. Next, you will learn how to work with reviews and ratings and also cover some of the advanced searching options offered by ArcGIS. You will then make use of advanced ArcObjects to develop your third application: an excavation planning manager. The book will conclude by teaching you how work out excavation cost calculations and also saving and retrieving your excavation designs. Style and approach The book offers an enhanced way of learning ArcGIS, through the design and development of three applications throughout its length. In addition to this the book also covers features that you can add to your application as you develop each one covered in the book.

ArcGIS By Example

If you are a web developer working with geospatial concepts and mapping APIs, and you want to learn Leaflet to create mapping solutions, this book is for you. You need to have a basic knowledge of working with JavaScript and performing web application development.

Leaflet.js Essentials

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 appendixes 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 Map algebra with NumPy and SciPy Map classification Visualizing data Appendixes A - Installation B - References C - OGR - online only D - OSR - online only E - GDAL - online only

ArcGIS Developer's Guide for VBA

Acquire all the practical information needed to develop ASP.NET applications for ArcGIS Server in this straightforward, easy-to-follow programming guide. Programming ASP.NET for ArcGIS Server provides a solid introduction to ArcGIS Server, and progresses into coverage of a variety of practical applications. The latest topics in GIS are addressed, including GIS web applications, GIS web services, and wireless GIS applications for mobile devices, such as PDAs and cellular phones. Ideal for programmers and GIS professionals alike, this innovative book offers functional coverage of the software, updated to its latest release. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Geoprocessing with Python

A conceptual introduction and practical primer to the application of imagery and remote sensing data in GIS (geographic information systems).

Programming ASP.NET for ArcGIS Server

Learn how to confidently install, configure, secure, and fully utilize your ArcGIS Enterprise system. About This Book Install and configure the components of ArcGIS Enterprise to meet your organization's requirements Administer all aspects of ArcGIS Enterprise through user interfaces and APIs Optimize and Secure ArcGIS Enterprise to make it run efficiently and effectively Who This Book Is For This book will be geared toward senior GIS analysts, GIS managers, GIS administrators, DBAs, GIS architects, and GIS engineers that need to install, configure, and administer ArcGIS Enterprise 10.5.1. What You Will Learn Effectively install and configure ArcGIS Enterprise, including the Enterprise geodatabase, ArcGIS Server, and Portal for ArcGIS Incorporate different methodologies to manage and publish services Utilize the security methods available in ArcGIS Enterprise Use Python and Python libraries from Esri to automate administrative tasks Identify the common pitfalls and errors to get your system back up and running quickly from an outage In Detail ArcGIS Enterprise, the next evolution of the ArcGIS Server product line, is a full-featured mapping and analytics platform. It includes a powerful GIS web services server and a dedicated Web GIS infrastructure for organizing and sharing your work. You will learn how to first install ArcGIS Enterprise to then plan, design, and finally publish and consume GIS services. You will install and configure an Enterprise geodatabase and learn how to administer ArcGIS Server, Portal, and Data Store through user interfaces, the REST API, and Python scripts. This book starts off by explaining how ArcGIS Enterprise 10.5.1 is different from earlier versions of ArcGIS Server and covers the installation of all the components required for ArcGIS Enterprise. We then move on to geodatabase administration and content publication, where you will learn how to use ArcGIS Server Manager to view the server logs, stop and start services, publish services, define users and roles for security, and perform other administrative tasks. You will also learn how to apply security mechanisms on ArcGIS Enterprise and safely expose services to the public in a secure manner. Finally, you'll use the RESTful administrator API to automate server management tasks using the Python scripting language. You'll learn all the best practices and troubleshooting methods to streamline the management of all the interconnected parts of ArcGIS Enterprise. Style and approach The book takes a pragmatic approach, starting with installation & configuration of ArcGIS Enterprise to finally building a robust GIS web infrastructure for your organization.

The ArcGIS Imagery Book

Learn how to build native, cross-platform mapping apps with this comprehensive and practical guide, using the MVVM pattern About This Book Enhance the user experience with the power of ArcGIS runtime SDK for .NET. This clear, well segregated book has all the information you need on ArcGIS Runtime SDK. Just name it—this book has it! This highly practical book empowers you to build your own custom application! Get to know the inner details of ArcGIS Runtime SDK from our experts, in this book written by Ron Vincent, with 24 years' experience in the GIS industry and many in GIS training. Who This Book Is For This book caters to long-term users of Esri's technologies that are new to mobile development or are transitioning from older Esri technologies such as ArcGIS Engine. It is also for users who are unfamiliar with Esri or GIS and are in need of a mapping solution for either their desktop or a mobile platform, or both. The book requires knowledge of .NET. What You Will Learn Understand and implement the MVVM pattern using MVVM Light Create and add layers from offline and online resources such as ArcGIS Online or ArcGIS for Server Create a 2D or 3D map and decide what kind of symbology to use Symbolize the layers based on the geometry Search and find objects in the layers Geocode an address and create a route using an address Edit layer objects from online content and offline content Test the application using test-driven development and then build and release the application for the intended audience In Detail ArcGIS is a geographic information system (GIS) that enables you to work with maps and geographic information. It can be used to create and utilize maps, compile geographic data, analyze mapped information, share and discover geographic information and manage geographic information in a database. This book starts by showing you where ArcGIS Runtime fits within Esri's overall platform strategy. You'll create an initial map using the SDK, then use it to get an understanding of the MVVM model. You'll find out about the different kinds of layers and start adding layers, and you'll learn to transform maps into a 3D scene. The next chapters will help you comprehend and extract information contained in the maps using co-ordinates and layer objects. Towards the end, you will learn to set the symbology, decide whether to use 2D or 3D, see how to implement 2D or 3D, and learn to search and find objects. You'll also get to grips with many other standard features of the

Application Programming Interface (API), including create applications and finally testing, licensing, and deploying them. Once completed, you will be able to meet most of the common requirements of any mapping application for desktop or mobile platforms. Style and approach This comprehensive book takes a completely practical approach, where every chapter explains the important concepts and demonstrates a practical application of them in a hands-on manner.

Mastering ArcGIS Enterprise Administration

This guide provides a general explanation for leveraging the capabilities of the ArcGIS Engine Developer Kit, which is a platform for building stand-alone GIS applications with access to advanced GIS objects using multiple Application Programming Interfaces (API's). The book also includes several scenarios illustrating different types of applications that can be developed using the ArcGIS Engine Developer Kit. ArcGIS Engineprovides the framework for developers to connect to remote ArcGIS Server objects or create focused GIS applications that can be executed as stand-alone applications or deployed inside of ArcGIS Desktop productsArcInfo, ArcEditor, and ArcView. The entire ArcGIS system is built and extended using software components called ArcObjects, which are at the core of all ArcGIS products.

Learning ArcGIS Runtime SDK for .NET

Training workbook on the software package ArcGIS Online. The lessons go through how to develop web-based mapping and user apps as well ad field data collection apps. The focus is on mapping for disaster response, but the techniques can be applied to any discipline.

ArcGIS 9

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]

Building Web Maps and Apps with ArcGIS Online

*Describes an agile process that works on large projects *Ideal for hurried developers who want to develop software in teams *Incorporates real-life C#/.NET web project; can compare this with cases in book

Web GIS

Provides information on the basics of Ajax to create Web applications that function like desktop programs.

Agile Development with ICONIX Process

The Encyclopedia of GIS provides a comprehensive and authoritative guide, contributed by experts and peer-reviewed for accuracy, and alphabetically arranged for convenient access. The entries explain key software and processes used by geographers and computational scientists. Major overviews are provided for nearly 200 topics: Geoinformatics, Spatial Cognition, and Location-Based Services and more. Shorter entries define specific terms and concepts. The reference will be published as a print volume with abundant black and white art, and simultaneously as an XML online reference with hyperlinked citations, cross-references, four-color art, links to web-based maps, and other interactive features.

Ajax

This is a hands-on book about ArcGIS that you work with as much as read. By the end, using Learn ArcGIS lessons, you'll be able to say you made a story map, conducted geographic analysis, edited geographic data, worked in a 3D web scene, built a 3D model of Venice, and more.

Encyclopedia of GIS

If you are a GIS student or professional who needs an understanding of how to use ArcPy to reduce repetitive tasks and perform analysis faster, this book is for you. It is also a valuable book for Python programmers who want to understand how to automate geospatial analyses.

The ArcGIS Book

Sam loves to design things! She plans to be a landscape architect. Follow along as she designs parks, gardens, and more to improve her community. Part of a STEAM career-themed picture book series.

ArcPy and ArcGIS – Geospatial Analysis with Python

Sam the Landscape Architect