The Truthful Art Data Charts And Maps For Communication

The essential characteristic of a dynamic graphical method is the direct manipulation of elements of a graph on a computer screen, which in high-performance implementations, the elements change virtually instantaneously on the screen. This book contains a collection of papers about dynamic graphics dating from the late 1960s to 1988. Although technology has advanced considerably, the fundamental ideas about basic graphical principles and data-analytic goals are still relevant today.

Includes video access code for over 2 hours of video.

The Truthful Art is an introduction to data reasoning and statistical and cartographical representation written for anyone who wishes to communicate effectively, including journalists, graphic designers, scientists, and business professionals. A follow-up to The Functional Art, it goes into the specifics of how to design appealing, credible, and informative infographics and data visualizations. Part 1 in The Truthful Art provides a broad introduction to statistics, written with journalists and designers in mind. Cairo avoids using jargon and formulas, focusing instead on how to manage and interpret data sets, and how to extract stories from them. In Part 2, Cairo gets down to business giving specific advice on how to use charts and maps in infographics and visualization. Readers will learn what kind of statistical charts exist and how to use them correctly; how to talk about maps, with an introduction to cartography terms such as projection, scale, and symbolization; the basics of making maps, including how to create locator maps; and the main kinds of thematic maps (choropleth, isopleth, proportional symbol, etc.) and how to use them. In Part 3, Cairo leaves the classroom and enters the real world with an in-depth look at how information graphics and visualization teams are organized at publications around the world including The New York Times, La Nación (Costa Rica),Estado de São Paulo (Brazil), and more. He also explains how to develop a successful style book for graphics using sample pages from several real style books as examples. Part 4, the last section of the book, features interviews with leading designers of charts and maps including the talented Jer Thorp, Amanda Cox, Ben Fry, and more.

How do we create new ways of looking at the world? Join award-winning data storyteller RJ Andrews as he pushes beyond the usual how-to, and takes you on an adventure into the rich art of informing. Creating Info We Trust is a craft that puts the world into forms that are strong and true. It begins with maps, diagrams, and charts — but must push further than dry defaults to be truly effective. How do we attract attention? How can we offer audiences valuable experiences worth their time? How can we help people access complexity? Dark and mysterious, but full of potential, data is the raw material from which new understanding can emerge. Become a hero of the information age as you learn how to dip into the chaos of data and emerge with new understanding that can entertain, improve, and inspire. Whether you call the craft data storytelling, data visualization, data journalism, dashboard design, or infographic creation — what matters is that you are courageously confronting the chaos of it all in order to improve how people see the world. Info We Trust is written for everyone who straddles the domains of data and people: data visualization professionals, analysts, and all who are enthusiastic for seeing the world in new ways. This book draws from the entirety of human experience, quantitative and poetic. It teaches advanced techniques, such as visual metaphor and data transformations, in order to create more human presentations of data. It also shows how we can learn from print advertising, engineering, museum curation, and mythology archetypes. This human-centered approach works with machines to design information for people. Advance your understanding beyond by learning from a broad tradition of putting things "in formation" to create new and wonderful ways of opening our eyes to the world. Info We Trust takes a thoroughly original point of attack on the art of informing. It builds on decades of best practices and adds the creative enthusiasm of a world-class data storyteller. Info We Trust is lavishly illustrated with hundreds of original compositions designed to illuminate the craft, delight the reader, and inspire a generation of data storytellers.

Effective Data Visualization

The Big Picture: How to Use Data Visualization to Make Better Decisions—Faster

#MakeoverMonday

Data Visualization

How to Put the Artificial Intelligence Revolution to Work

Visualization That Means Something

The Right Chart for the Right Data

Information visualization is a language. Like any language, it can be used for multiple purposes. A poem, a novel, and an essay all share the same language, but each one has its own set of rules. The same is true with information visualization: a product manager, statistician, and graphic designer each approach visualization from different perspectives. Data at Work was written with you, the spreadsheet user, in mind. This book will teach you how to think about and organize data in ways that directly relate to your work, using the skills you already have. In other words, you don't need to be a graphic designer to create functional, elegant charts: this book will show you how. Although all of the examples in this book were created in Microsoft Excel, this is not a book about how to use Excel. Data at Work will help you to know which type of chart to use and how to format it, regardless of which spreadsheet application you use and whether or not you have any design experience. In this book, you'll learn how to extract, clean, and transform data; sort data points to identify patterns and detect outliers; and understand how and when to use a variety of data visualizations including bar charts, slope charts, strip charts, scatter plots, bubble charts, boxplots, and more. Because this book is not a manual, it never specifies the steps required to make a chart, but the relevant charts will be available online for you to download, with brief explanations of how they were created.

A new way of thinking about data science and data ethics that is informed by the ideas of intersectional feminism. Today, data science is a form of power. It has been used to expose injustice, improve health outcomes, and topple governments. But it has also been used to discriminate, police, and surveil. This potential for good, on the one hand, and harm, on the other, makes it essential to ask: Data science by whom? Data science for whom? Data science with whose interests in mind? The narratives around big data and data science are overwhelmingly white, male, and techno-heroic. In Data Feminism, Catherine D'Ignazio and Lauren Klein present a new way of thinking about data science and data ethics—one that is informed by intersectional feminist thought. Illustrating data feminism in action, D'Ignazio and Klein show how challenges

to the male/female binary can help challenge other hierarchical (and empirically wrong) classification systems. They explain how, for example, an understanding of emotion can expand our ideas about effective data visualization, and how the concept of invisible labor can expose the significant human efforts required by our automated systems. And they show why the data never, ever "speak for themselves." Data Feminism offers strategies for data scientists seeking to learn how feminism can help them work toward justice, and for feminists who want to focus their efforts on the growing field of data science. But Data Feminism is about much more than gender. It is about power, about who has it and who doesn't, and about how those differentials of power can be challenged and changed.

No matter what your actual job title, you are—or soon will be—a data worker. Every day, at work, home, and school, we are bombarded with vast amounts of free data collected and shared by everyone and everything from our co-workers to our calorie counters. In this highly anticipated follow-up to The Functional Art—Alberto Cairo's foundational guide to understanding information graphics and visualization—the respected data visualization professor explains in clear terms how to work with data, discover the stories hidden within, and share those stories with the world in the form of charts, maps, and infographics. In The Truthful Art, Cairo transforms elementary principles of data and scientific reasoning into tools that you can use in daily life to interpret data sets and extract stories from them. The Truthful Art explains: • The role infographics and data visualization play in our world • Basic principles of data and scientific reasoning that anyone can master • How to become a better critical thinker • Step-by-step processes that will help you evaluate any data visualization (including your own) • How to create and use effective charts, graphs, and data maps to explain data to any audience The Truthful Art is also packed with inspirational and educational real-world examples of data visualizations from such leading publications as The New York Times, The Wall Street Journal, Estado de São Paulo (Brazil), Berliner Morgenpost (Germany), and many more.

Make information memorable with creative visual designtechniques Research shows that visual information is more quickly andeasily understood, and much more likely to be remembered. Thisinnovative book presents the design process and the best softwaretools for creating infographics that communicate. Including aspecial section on how to construct the increasingly popularinfographic resume, the book offers graphic designers, marketers,and business professionals vital information on the most effectiveways to present data. Explains why infographics and data visualizations work Shares the tools and techniques for creating greatinfographics Covers online infographics used for marketing, including socialmedia and search engine optimization (SEO) Shows how to market your skills with a visual, infographicresume Explores the many internal business uses of infographics,including board meeting presentations, annual reports, consumerresearch statistics, marketing strategies, business plans, andvisual explanations of products and services to your customers With Cool Infographics, you'll learn to createinfographics to successfully reach your target audience and tellclear stories with your data.

Atlas of Knowledge

Information Visualization

Infographics from the World's Best Newsrooms and Designers

Dynamic Graphics Statistics

Transhuman and Subhuman

A Practical Introduction

Cartographic Grounds

Influence action through data! This is not a book. It is a one-of-a-kind immersive learning experience through which you can become—or teach others to be—a powerful data storyteller. Let's practice! helps you build confidence and credibility to create graphs and visualizations that make sense and weave them into action-inspiring stories. Expanding upon best seller storytelling with data's foundational lessons, Let's practice! delivers fresh content, a plethora of new examples, and over 100 hands-on exercises. Author and data storytelling maven Cole Nussbaumer Knaflic guides you along the path to hone core skills and become a well-practiced data communicator. Each chapter includes: • Practice with Cole: exercises based on real-world examples first posed for you to consider and solve, followed by detailed step-by-step illustration and explanation • Practice on your own: thought-provoking questions and even more exercises to be assigned or worked through individually, without prescribed solutions • Practice at work: practical guidance and hands-on exercises for applying storytelling with data lessons on the job, including instruction on when and how to solicit useful feedback and refine for greater impact The lessons and exercises found within this comprehensive guide will empower you to master—or develop in others—data storytelling skills and transition your work from acceptable to exceptional. By investing in these skills for ourselves and our teams, we can all tell inspiring and influential data stories!

This book presents an accessible introduction to data-driven storytelling. Resulting from unique discussions between data visualization researchers and data journalists, it offers an integrated definition of the topic, presents vivid examples and patterns for data storytelling, and calls out key challenges and new opportunities for researchers and practitioners.

The visualization process doesn't happen in a vacuum; it is grounded in principles and methodologies of design, cognition, perception, and human-computer-interaction that are combined to one's personal knowledge and creative experiences. Design for Information critically examines other design solutions—current and historic— helping you gain a larger understanding of how to solve specific problems. This book is designed to help you foster the development of a repertoire of existing methods and concepts to help you overcome design problems. Learn the ins and outs of data visualization with this informative book that provides you with a series of current visualization case studies. The visualizations discussed are analyzed for their design principles and methods, giving you valuable critical and analytical tools to further develop your design process. The case study format of this book is perfect for discussing the histories, theories and best practices in the field through real-world, effective visualizations. The selection represents a fraction of effective visualizations that we encounter in this burgeoning field, allowing you the opportunity to extend your study to other solutions in your specific field(s) of practice. This book is

also helpful to students in other disciplines who are involved with visualizing information, such as those in the digital humanities and most of the sciences.
The National Audubon Society's annual Christmas Bird Count stars in this charming picture book, just right for young community scientists, bird watchers, and nature aficionados. A young girl and her mother participate as community scientists in the Christmas Bird Count. The girl is excited when Big Al, the leader of their team, asks her to record the tally this year. Using her most important tools─her eyes and ears─she eagerly identifies and counts the birds they observe on their assigned route around town. She and her team follow the rules, noting the time of day, the habitat, the birding ID techniques used for each sighting. Finally, they meet up with the other teams in the area to combine their totals for a Christmas Bird Count party and share stories about their observations. Sidebars tally up the birds they observe and record. This book introduces young readers to birdwatching with simple explanations of birdwatching techniques and clear descriptions of bird habitats. Stephanie Fizer Coleman's charming illustrations add color and context to a joyful story that's sure to inspire the nature lover in everyone. Back matter includes more information about all the birds featured in the book and about the Christmas Bird Count, the nation's longest-running community science bird project. Capitol Choices Noteworthy Books for Children and Teens Parents' Choice Silver Honor Award Mathical Honor Award International Literacy Association Primary Fiction Award
Data Points
An Introduction to the Histories, Theories, and Best Practices Behind Effective Information Visualizations
Picturing the Uncertain World
Data Sketches
Essays on Science Fiction and Awful Truth
The Big Book of Dashboards

The definitive reference book with real-world solutions you won't find anywhere else The Big Book of Dashboards presents a comprehensive reference for those tasked with building or overseeing the development of business dashboards. Comprising dozens of examples that address different industries and departments (healthcare, transportation, finance, human resources, marketing, customer service, sports, etc.) and different platforms (print, desktop, tablet, smartphone, and conference room display) The Big Book of Dashboards is the only book that matches great dashboards with real-world business scenarios. By organizing the book based on these scenarios and offering practical and effective visualization examples, The Big Book of Dashboards will be the trusted resource that you open when you need to build an effective business dashboard. In addition to the scenarios there's an entire section of the book that is devoted to addressing many practical and psychological factors you will encounter in your work. It's great to have theory and evidenced-based research at your disposal, but what will you do when somebody asks you to make your dashboard 'cooler' by adding packed bubbles and donut charts? The expert authors have a combined 3O-plus years of hands-on experience helping people in hundreds of organizations build effective visualizations. They have fought many 'best practices' battles and having endured bring an uncommon empathy to help you, the reader of this book, survive and thrive in the data visualization world. A well-designed dashboard can point out risks, opportunities, and more; but common challenges and misconceptions can make your dashboard useless at best, and misleading at worst. The Big Book of Dashboards gives you the tools, guidance, and models you need to produce great dashboards that inform, enlighten, and engage.
A leading data visualization expert explores the negative—and positive—influences that charts have on our perception of truth. We've all heard that a picture is worth a thousand words, but what if we don't understand what we're looking at? Social media has made charts, infographics, and diagrams ubiquitous—and easier to share than ever. We associate charts with science and reason; the flashy visuals are both appealing and persuasive. Pie charts, maps, bar and line graphs, and scatter plots (to name a few) can better inform us, revealing patterns and trends hidden behind the numbers we encounter in our lives. In short, good charts make us smarter—if we know how to read them. However, they can also lead us astray. Charts lie in a variety of ways—displaying incomplete or inaccurate data, suggesting misleading patterns, and concealing uncertainty—or are frequently misunderstood, such as the confusing cone of uncertainty maps shown on TV every hurricane season. To make matters worse, many of us are ill-equipped to interpret the visuals that politicians, journalists, advertisers, and even our employers present each day, enabling bad actors to easily manipulate them to promote their own agendas. In How Charts Lie, data visualization expert Alberto Cairo teaches us to not only spot the lies in deceptive visuals, but also to take advantage of good ones to understand complex stories. Public conversations are increasingly propelled by numbers, and to make sense of them we must be able to decode and use visual information. By examining contemporary examples ranging from election-result infographics to global GDP maps and box-office record charts, How Charts Lie demystifies an essential new literacy, one that will make us better equipped to navigate our data-driven world.
A fresh look at visualization from the author of Visualize This Whether it's statistical charts, geographic maps, or the snappy graphical statistics you see on your favorite news sites, the art of data graphics or visualization is fast becoming a movement of its own. In Data Points: Visualization That Means Something, author Nathan Yau presents an intriguing complement to his bestseller Visualize This, this time focusing on the graphics side of data analysis. Using examples from art, design, business, statistics, cartography, and online media, he

explores both standard-and not so standard-concepts and ideas about illustrating data. Shares intriguing ideas from Nathan Yau, author of Visualize This and creator of flowingdata.com, with over 66,000 subscribers Focuses on visualization, data graphics that help viewers see trends and patterns they might not otherwise see in a table Includes examples from the author's own illustrations, as well as from professionals in statistics, art, design, business, computer science, cartography, and more Examines standard rules across all visualization applications, then explores when and where you can break those rules Create visualizations that register at all levels, with Data Points: Visualization That Means Something.

One of the "six best books for data geeks" - Financial Times With over 200 images and extensive how-to and how-not-to examples, this new edition has everything students and scholars need to understand and create effective data visualisations. Combining 'how to think' instruction with a 'how to produce' mentality, this book takes readers step-by-step through analysing, designing, and curating information into useful, impactful tools of communication. With this book and its extensive collection of online support, readers can: - Decide what visualisations work best for their data and their audience using the chart gallery - See data visualisation in action and learn the tools to try it themselves - Follow online checklists, tutorials, and exercises to build skills and confidence - Get advice from the UK's leading data visualisation trainer on everything from getting started to honing the craft. Explore more resources about data visualisation and Andy Kirk.

Cool Infographics

The Functional Art

Designing Data Visualizations

The FlowingData Guide to Design, Visualization, and Statistics

Improving How We Visualize and Analyze Data, One Chart at a Time

Storytelling with Data

Data Feminism

Don't simply show your data—tell a story with it! Storytelling with Data teaches you the fundamentals of data visualization and how to communicate effectively with data. You'll discover the power of storytelling and the way to make data a pivotal point in your story. The lessons in this illuminative text are grounded in theory, but made accessible through numerous real-world examples—ready for immediate application to your next graph or presentation. Storytelling is not an inherent skill, especially when it comes to data visualization, and the tools at our disposal don't make it any easier. This book demonstrates how to go beyond conventional tools to reach the root of your data, and how to use your data to create an engaging, informative, compelling story. Specifically, you'll learn how to: Understand the importance of context and audience Determine the appropriate type of graph for your situation Recognize and eliminate the clutter clouding your information Direct your audience's attention to the most important parts of your data Think like a designer and utilize concepts of design in data visualization Leverage the power of storytelling to help your message resonate with your audience Together, the lessons in this book will help you turn your data into high impact visual stories that stick with your audience. Rid your world of ineffective graphs, one exploding 3D pie chart at a time. There is a story in your data—Storytelling with Data will give you the skills and power to tell it!

The data visualization handbook is a practical guide to creating compelling graphics to explain or explore data. It is primarily aimed for designers, journalists, researchers, analysts, and other professionals who want to learn the basics of visualization, but also includes plenty of material for people with intermediate level visualization skills.

Cutting through the hype, a practical guide to using artificial intelligence for business benefits and competitive advantage. In The AI Advantage, Thomas Davenport offers a guide to using artificial intelligence in business. He describes what technologies are available and how companies can use them for business benefits and competitive advantage. He cuts through the hype of the AI craze—remember when it seemed plausible that IBM's Watson could cure cancer?—to explain how businesses can put artificial intelligence to work now, in the real world. His key recommendation: don't go for the "moonshot" (curing cancer, or synthesizing all investment knowledge); look for the "low-hanging fruit" to make your company more efficient. Davenport explains that the business value AI offers is solid rather than sexy or splashy. AI will improve products and processes and make decisions better informed—important but largely invisible tasks. AI technologies won't replace human workers but augment their capabilities, with smart machines to work alongside smart people. AI can automate structured and repetitive work; provide extensive analysis of data through machine learning ("analytics on steroids"), and engage with customers and employees via chatbots and intelligent agents. Companies should experiment with these technologies and develop their own expertise. Davenport describes the major AI technologies and explains how they are being used, reports on the AI work done by large commercial enterprises like Amazon and Google, and outlines strategies and steps to becoming a cognitive corporation. This book provides an invaluable guide to the real-world future of business AI. A book in the Management on the Cutting Edge series, published in cooperation with MIT Sloan Management Review.

You know right away when you see an effective chart or graphic. It hits you with an immediate sense of its meaning and impact. But what actually makes it clearer, sharper, and more effective? If you're ready to create your own "good charts"--data visualizations that powerfully communicate your ideas and research and that advance your career--the Good Charts Workbook is the hands-on guide you've been looking for. The original Good Charts changed the landscape by helping readers understand how to think visually and by laying out a process for creating powerful data visualizations. Now, the Good Charts Workbook provides tools, exercises, and practical insights to help people in all

kinds of enterprises gain the skills they need to get started. Harvard Business Review Senior Editor and dataviz expert Scott Berinato leads you, step-by-step, through the key challenges in creating good charts--controlling color, crafting for clarity, choosing chart types, practicing persuasion, capturing concepts--with warm-up exercises and mini-challenges for each. The Workbook includes helpful prompts and reminders throughout, as well as white space for users to practice the Good Charts talk-sketch-prototype process. Good Charts Workbook is the must-have manual for better understanding the dataviz around you and for creating better charts to make your case more effectively.

The Sketchnote Workbook

A Handbook for Data Driven Design

An introduction to information graphics and visualization

Perception for Design

How Charts Lie: Getting Smarter about Visual Information

Better Data Visualizations

Bird Count

An accessible primer on how to create effective graphics from data This book provides students and researchers a hands-on introduction to the principles and practice of data visualization. It explains what makes some graphs succeed while others fail, how to make high-quality figures from data using powerful and reproducible methods, and how to think about data visualization in an honest and effective way. Data Visualization builds the reader's expertise in ggplot2, a versatile visualization library for the R programming language. Through a series of worked examples, this accessible primer then demonstrates how to create plots piece by piece, beginning with summaries of single variables and moving on to more complex graphics. Topics include plotting continuous and categorical variables; layering information on graphics; producing effective "small multiple" plots; grouping, summarizing, and transforming data for plotting; creating maps; working with the output of statistical models; and refining plots to make them more comprehensible. Effective graphics are essential to communicating ideas and a great way to better understand data. This book provides the practical skills students and practitioners need to visualize quantitative data and get the most out of their research findings. Provides hands-on instruction using R and ggplot2 Shows how the "tidyverse" of data analysis tools makes working with R easier and more consistent Includes a library of data sets, code, and functions

Data visualization is an efficient and effective medium for communicating large amounts of information, but the design process can often seem like an unexplainable creative endeavor. This concise book aims to demystify the design process by showing you how to use a linear decision-making process to encode your information visually. Delve into different kinds of visualization, including infographics and visual art, and explore the influences at work in each one. Then learn how to apply these concepts to your design process. Learn data visualization classifications, including explanatory, exploratory, and hybrid Discover how three fundamental influences—the designer, the reader, and the data—shape what you create Learn how to describe the specific goal of your visualization and identify the supporting data Decide the spatial position of your visual entities with axes Encode the various dimensions of your data with appropriate visual properties, such as shape and color See visualization best practices and suggestions for encoding various specific data types

The power of mapping: principles for visualizing knowledge, illustrated by many stunning large-scale, full-color maps. Maps of physical spaces locate us in the world and help us navigate unfamiliar routes. Maps of topical spaces help us visualize the extent and structure of our collective knowledge; they reveal bursts of activity, pathways of ideas, and borders that beg to be crossed. This book, from the author of Atlas of Science, describes the power of topical maps, providing readers with principles for visualizing knowledge and offering as examples forty large-scale and more than 100 small-scale full-color maps. Today, data literacy is becoming as important as language literacy. Well-designed visualizations can rescue us from a sea of data, helping us to make sense of information, connect ideas, and make better decisions in real time. In Atlas of Knowledge, leading visualization expert Katy Börner makes the case for a systems science approach to science and technology studies and explains different types and levels of analysis. Drawing on fifteen years of teaching and tool development, she introduces a theoretical framework meant to guide readers through user and task analysis; data preparation, analysis, and visualization; visualization deployment; and the interpretation of science maps. To exemplify the framework, the Atlas features striking and enlightening new maps from the popular "Places & Spaces: Mapping Science" exhibit that range from "Key Events in the Development of the Video Tape Recorder" to "Mobile Landscapes: Location Data from Cell Phones for Urban Analysis" to "Literary Empires: Mapping Temporal and Spatial Settings of Victorian Poetry" to "Seeing Standards: A Visualization of the Metadata Universe." She also discusses the possible effect of science maps on the practice of science.

Now more than ever, content must be visual if it is to travel far. Readers everywhere are overwhelmed with a flow of data, news, and text. Visuals can cut through the noise and make it easier for readers to recognize and recall information. Yet many researchers were never taught how to present their work visually. This book details essential strategies to create more effective data visualizations. Jonathan Schwabish walks readers through the steps of creating better graphs and how to move beyond simple line, bar, and pie charts. Through more than five hundred examples, he demonstrates the do's and don'ts of data visualization, the principles of visual perception, and how to make subjective style decisions around a chart's design. Schwabish surveys more than eighty visualization types, from histograms to horizon charts, ridgeline plots to choropleth maps, and explains how each has its place in the visual toolkit. It might seem intimidating, but everyone can learn how to create compelling, effective data visualizations. This book will guide you as

you define your audience and goals, choose the graph that best fits for your data, and clearly communicate your message.
Advanced Techniques for Taking Visual Notes You Can Use Anywhere
A journey of imagination, exploration, and beautiful data visualizations
Representing Informational Relationships
How to Inspire the World with Data
Practical Tableau
Data Visualisation
Design for Information

"Shoot him with an elf arrow!"Learn why this may be author John C. Wright's most famous line!A collection of brilliant and thought-provoking essays by the science fiction grandmaster John C. Wright. From the history of the Golden Age of science fiction to the ideology of the gender wars presently dividing hard science fiction from urban fantasy-romance, Wright's commentary is always intelligent, observant, and precisely to the point.In the 16 essays that make up the collection, Wright addresses a wide spectrum of ideas. He considers the darker possibilities of transhumanism, provides a professorial lesson on the mechanics of writing fiction, explains the noble purpose underlying science fiction, and shows how the genre's obsession with strong female characters is nothing less than an attack on human nature. In every essay, Wright exhibits his compassion, his humanity, and his deep and abiding love for literature.John C. Wright has been described as one of the most important and audacious authors in science fiction today. In a recent poll of more than 1,000 science fiction readers, he was chosen as the sixth-greatest living science fiction writer.

Whether you have some experience with Tableau software or are just getting started, this manual goes beyond the basics to help you build compelling, interactive data visualization applications. Author Ryan Sleeper, one of the world's most qualified Tableau consultants, complements his web posts and instructional videos with this guide to give you a firm understanding of how to use Tableau to find valuable insights in data. Over five sections, Sleeper—recognized as a Tableau Zen Master, Tableau Public Visualization of the Year author, and Tableau Iron Viz Champion—provides visualization tips, tutorials, and strategies to help you avoid the pitfalls and take your Tableau knowledge to the next level. Practical Tableau sections include: Fundamentals: get started with Tableau from the beginning Chart types: use step-by-step tutorials to build a variety of charts in Tableau Tips and tricks: learn innovative uses of parameters, color theory, how to make your Tableau workbooks run efficiently, and more Framework: explore the INSIGHT framework, a proprietary process for building Tableau dashboards Storytelling: learn tangible tactics for storytelling with data, including specific and actionable tips you can implement immediately

NOW IN FULL COLOR! Written by sought-after speaker, designer, and researcher Stephanie D. H. Evergreen, Effective Data Visualization shows readers how to create Excel charts and graphs that best communicate their data findings. This comprehensive how-to guide functions as a set of blueprints—supported by both research and the author's extensive experience with clients in industries all over the world—for conveying data in an impactful way. Delivered in Evergreen's humorous and approachable style, the book covers the spectrum of graph types available beyond the default options, how to determine which one most appropriately fits specific data stories, and easy steps for building the chosen graph in Excel. Now in full color with new examples throughout, the Second Edition includes a revamped chapter on qualitative data, nine new quantitative graph types, new shortcuts in Excel, and an entirely new chapter on Sharing Your Data With the World, which provides advice on using dashboards. New from Stephanie Evergreen! The Data Visualization Sketchbook provides advice on getting started with sketching and offers tips, guidance, and completed sample sketches for a number of reporting formats. Bundle Effective Data Visualization, 2e, and The Data Visualization Sketchbook, using ISBN 978-1-5443-7178-8!

In his entertaining and informative book Graphic Discovery, Howard Wainer unlocked the power of graphical display to make complex problems clear. Now he's back with Picturing the Uncertain World, a book that explores how graphs can serve as maps to guide us when the information we have is ambiguous or incomplete. Using a visually diverse sampling of graphical display, from heartrending autobiographical displays of genocide in the Kovno ghetto to the "Pie Chart of Mystery" in a New Yorker cartoon, Wainer illustrates the many ways graphs can be used--and misused--as we try to make sense of an uncertain world. Picturing the Uncertain World takes readers on an extraordinary graphical adventure, revealing how the visual communication of data offers answers to vexing questions yet also highlights the measure of uncertainty in almost everything we do. Are cancer rates higher or lower in rural communities? How can you know how much money to sock away for retirement when you don't know when you'll die? And where exactly did nineteenth-century novelists get their ideas? These are some of the fascinating questions Wainer invites readers to consider. Along the way he traces the origins and development of graphical display, from William Playfair, who pioneered the use of graphs in the eighteenth century, to instances today where the public has been misled through poorly designed graphs. We live in a world full of uncertainty, yet it is within our grasp to take its measure. Read Picturing the Uncertain World and learn how.
Projecting the Landscape Imaginary
Best practices for creating effective charts and information graphics in Microsoft Excel
Visual Journalism
Good Charts Workbook
Info We Trust

A Guide for Scholars, Researchers, and Wonks

Data at Work

Unlike any time before in our lives, we have access to vast amounts of free information. With the right tools, we can start to make sense of all this data to see patterns and trends that would otherwise be invisible to us. By transforming numbers into graphical shapes, we allow readers to understand the stories those numbers hide. In this practical introduction to understanding and using information graphics, you'll learn how to use data visualizations as tools to see beyond lists of numbers and variables and achieve new insights into the complex world around us. Regardless of the kind of data you're working with–business, science, politics, sports, or even your own personal finances–this book will show you how to use statistical charts, maps, and explanation diagrams to spot the stories in the data and learn new things from it. You'll also get to peek into the creative process of some of the world's most talented designers and visual journalists, including Condé Nast Traveler's John Grimwade, National Geographic Magazine's Fernando Baptista, The New York Times' Steve Duenes, The Washington Post's Hannah Fairfield, Hans Rosling of the Gapminder Foundation, Stanford's Geoff McGhee, and European superstars Moritz Stefaner, Jan Willem Tulp, Stefanie Posavec, and Gregor Aisch. The book also includes a DVD-ROM containing over 90 minutes of video lessons that expand on core concepts explained within the book and includes even more inspirational information graphics from the world's leading designers. The first book to offer a broad, hands-on introduction to information graphics and visualization, The Functional Art reveals: • Why data visualization should be thought of as "functional art" rather than fine art • How to use color, type, and other graphic tools to make your information graphics more effective, not just better looking • The science of how our brains perceive and remember information ¿ • Best practices for creating interactive information graphics • A comprehensive look at the creative process behind successful information graphics ¿ • An extensive gallery of inspirational work from the world's top designers and visual artists On the DVD-ROM: In this introductory video course on information graphics, Alberto Cairo goes into greater detail with even more visual examples of how to create effective information graphics that function as practical tools for aiding perception. You'll learn how to: incorporate basic design principles in your visualizations, create simple interfaces for interactive graphics, and choose the appropriate type of graphic forms for your data. Cairo also deconstructs successful information graphics from The New York Times and National Geographic magazine with sketches and images not shown in the book. All of Peachpit's eBooks contain the same content as the print edition. You will find a link in the last few pages of your eBook that directs you to the media files. Helpful tips: If you are able to search the book, search for "Where are the lesson files?" Go to the very last page of the book and scroll backwards. You will need a web-enabled device or computer in order to access the media files that accompany this ebook. Entering the URL supplied into a computer with web access will allow you to get to the files. Depending on your device, it is possible that your display settings will cut off part of the URL. To make sure this is not the case, try reducing your font size and turning your device to a landscape view. This should cause the full URL to appear.

As the world grows more complex, some of the best stories are told through visuals - infographics. From election results to catastrophes to wars to scientific discoveries: the stream of data we are exposed to daily becomes ever more complicated. Infographics help make sense of it, transforming difficult to grasp facts and figures into accessible visualizations. Print media are increasingly making successful use of them. Visual Journalism reveals the masters of this discipline and their finest works. The portraits of studios and individuals within this compendium illustrate how the world of infographics continues to evolve as it informs data and graphic trends. A visual revolution showcases the myriad possibilities of non-verbal communication.

Explore different perspectives and approaches to create more effective visualizations #MakeoverMonday offers inspiration and a giant dose of perspective for those who communicate data. Originally a small project in the data visualization community, #MakeoverMonday features a weekly chart or graph and a dataset that community members reimagine in order to make it more effective. The results have been astounding; hundreds of people have contributed thousands of makeovers, perfectly illustrating the highly variable nature of data visualization. Different takes on the same data showed a wide variation of theme, focus, content, and design, with side-by-side comparisons throwing more- and less-effective techniques into sharp relief. This book is an extension of that project, featuring a variety of makeovers that showcase various approaches to data communication and a focus on the analytical, design and storytelling skills that have been developed through #MakeoverMonday. Paging through the makeovers ignites immediate inspiration for your own work, provides insight into different perspectives, and highlights the techniques that truly make an impact. Explore the many approaches to visual data communication Think beyond the data and consider audience, stakeholders, and message Design your graphs to be intuitive and more communicative Assess the impact of layout, color, font, chart type, and other design choices Creating visual representation of complex datasets is tricky. There's the mandate to include all relevant data in a clean, readable format that best illustrates what the data is saying—but there is also the designer's impetus to showcase a command of the complexity and create multidimensional visualizations that "look cool." #MakeoverMonday shows you the many ways to walk the line between simple reporting and design artistry to create exactly the visualization the situation requires.

If you want to outsmart a crook, learn his tricks—Darrell Huff explains exactly how in the classic How to Lie with Statistics. From distorted graphs and biased samples to misleading averages, there are countless statistical dodges that lend cover to anyone with an ax to grind or a product to sell. With abundant examples and illustrations, Darrell Huff's lively and engaging primer clarifies the basic principles of statistics and explains how they're used to present information in honest and not-so-honest ways. Now even more indispensable in our data-driven world than it was when first published, How to Lie with Statistics is the book that generations of readers have relied on to keep from being fooled.

Data-Driven Storytelling

How to Drive Change with Data, Narrative and Visuals
Dear Data
100 Tips, Tutorials, and Strategies from a Tableau Zen Master
Data, Charts, and Maps for Communication
Data Visualization Handbook
Effective Communication with Data Visualization and Design
Mapping has been one of the most fertile areas of exploration for architecture and landscape in the past few decades. While documenting this shift in representation from the material and physical description toward the depiction of the unseen and often immaterial, Cartographic Grounds takes a critical view toward the current use of data mapping and visualization and calls for a return to traditional cartographic techniques to reimagine the manifestation and manipulation of the ground itself. Each of the ten chapters focuses on a single cartographic technique—sounding/spot elevation, isobath/contour, hachure/hatch, shaded relief, land classification, figure-ground, stratigraphic column, cross-section, line symbol, conventional sign—and illustrates it through beautiful maps and plans from notable designers and cartographers throughout history, from Leonardo da Vinci to James Corner Field Operations. Mohsen Mostafavi, dean of the Harvard Graduate School of Design, introduces the book.
"This is a book about what the science of perception can tell us about visualization. There is a gold mine of information about how we see to be found in more than a century of work by vision researchers. The purpose of this book is to extract from that large body of research literature those design principles that apply to displaying information effectively"--
The Truthful ArtData, Charts, and Maps for CommunicationNew Riders
Master the art and science of data storytelling—with frameworks and techniques to help you craft compelling stories with data. The ability to effectively communicate with data is no longer a luxury in today's economy; it is a necessity. Transforming data into visual communication is only one part of the picture. It is equally important to engage your audience with a narrative—to tell a story with the numbers. Effective Data Storytelling will teach you the essential skills necessary to communicate your insights through persuasive and memorable data stories. Narratives are more powerful than raw statistics, more enduring than pretty charts. When done correctly, data stories can influence decisions and drive change. Most other books focus only on data visualization while neglecting the powerful narrative and psychological aspects of telling stories with data. Author Brent Dykes shows you how to take the three central elements of data storytelling—data, narrative, and visuals—and combine them for maximum effectiveness. Taking a comprehensive look at all the elements of data storytelling, this unique book will enable you to: Transform your insights and data visualizations into appealing, impactful data stories Learn the fundamental elements of a data story and key audience drivers Understand the differences between how the brain processes facts and narrative Structure your findings as a data narrative, using a four-step storyboarding process Incorporate the seven essential principles of better visual storytelling into your work Avoid common data storytelling mistakes by learning from historical and modern examples Effective Data Storytelling: How to Drive Change with Data, Narrative and Visuals is a must-have resource for anyone who communicates regularly with data, including business professionals, analysts, marketers, salespeople, financial managers, and educators.
Effective Data Storytelling
The Truthful Art
Anyone Can Map
A Data Visualization Guide for Business Professionals
The AI Advantage
How to Lie with Statistics
Visualize This

Practical data design tips from a data visualization expert ofthe modern age Data doesn?t decrease; it is ever-increasing and can beoverwhelming to organize in a way that makes sense to its intendedaudience. Wouldn?t it be wonderful if we could actually visualizedata in such a way that we could maximize its potential and tell astory in a clear, concise manner? Thanks to the creative genius ofNathan Yau, we can. With this full-color book, data visualizationguru and author Nathan Yau uses step-by-step tutorials to show youhow to visualize and tell stories with data. He explains how togather, parse, and format data and then design high qualitygraphics that help you explore and present patterns, outliers, andrelationships. Presents a unique approach to visualizing and telling storieswith data, from a data visualization expert and the creator offlowingdata.com, Nathan Yau Offers step-by-step tutorials and practical design tips forcreating statistical graphics, geographical maps, and informationdesign to find meaning in the numbers Details tools that can be used to visualize data-nativegraphics for the Web, such as ActionScript, Flash libraries, PHP,and JavaScript and tools to design graphics for print, such as Rand Illustrator Contains numerous examples and descriptions of patterns andoutliers and explains how to show them Visualize This demonstrates how to explain data visually so thatyou can present your information in a way that is easy tounderstand and appealing.
In Data Sketches, Nadieh Bremer and Shirley Wu document the deeply creative process behind 24 unique data visualization projects, and they combine this with powerful technical insights which reveal the mindset behind coding creatively. Exploring 12 different themes – from the Olympics to Presidents & Royals and from Movies to Myths & Legends – each pair of visualizations explores different technologies and forms, blurring the boundary between visualization as an exploratory tool and an artform in its own right. This beautiful book provides an intimate, behind-the-scenes account of all 24 projects and shares the authors' personal notes and drafts every step of the way. The book features: Detailed information on data gathering, sketching, and coding data visualizations for the web, with screenshots of works-in-progress and reproductions from the authors' notebooks Never-before-published technical write-ups, with beginner-friendly explanations of core data visualization concepts Practical lessons based on the data and design challenges overcome during each project Full-color pages, showcasing all 24 final data

visualizations This book is perfect for anyone interested or working in data visualization and information design, and especially those who want to take their work to the next level and are inspired by unique and compelling data-driven storytelling.

Equal parts mail art, data visualization, and affectionate correspondence, Dear Data celebrates "the infinitesimal, incomplete, imperfect, yet exquisitely human details of life," in the words of Maria Popova (Brain Pickings), who introduces this charming and graphically powerful book. For one year, Giorgia Lupi, an Italian living in New York, and Stefanie Posavec, an American in London, mapped the particulars of their daily lives as a series of hand-drawn postcards they exchanged via mail weekly—small portraits as full of emotion as they are data, both mundane and magical. Dear Data reproduces in pinpoint detail the full year's set of cards, front and back, providing a remarkable portrait of two artists connected by their attention to the details of their lives—including complaints, distractions, phone addictions, physical contact, and desires. These details illuminate the lives of two remarkable young women and also inspire us to map our own lives, including specific suggestions on what data to draw and how. A captivating and unique book for designers, artists, correspondents, friends, and lovers everywhere.

Not a data expert? Here's an engaging and entertaining guide to interpreting and drawing insights from any chart, graph, or other data visualization you'll encounter. You're a business professional, not a data scientist. How do you make heads or tails of the data visualizations that come across your desk—let alone make critical business decisions based on the information they're designed to convey? In The Big Picture, top data visualization consultant Steve Wexler provides the tools for developing the graphical literacy you need to understand the data visualizations that are flooding your inbox—and put that data to use. Packed with the best four-color examples created in Excel, Tableau, Power BI, and Qlik, among others, this one-stop resource empowers you to extract the most important information from data visualizations quickly and accurately, act on key insights, solve problems, and make the right decisions for your organization every time.

Visualizing Your Data Using Real-World Business Scenarios

How to Understand, Communicate, and Control Uncertainty through Graphical Display

Tips, Tools, and Exercises for Making Better Data Visualizations

Let's Practice!