

Mastering Metrics The Path From Cause To Effect

This book provides a comprehensive yet accessible guide to running randomized impact evaluations of social programs. Drawing on the experience of researchers at the Abdul Latif Jameel Poverty Action Lab, which has run hundreds of such evaluations in dozens of countries throughout the world, it offers practical insights on how to use this powerful technique, especially in resource-poor environments. This step-by-step guide explains why and when randomized evaluations are used and in what situations they should be used, and how to prioritize different evaluation opportunities. It shows how to design and analyze studies that answer important questions while respecting the constraints of those working on and benefiting from the program being evaluated. The book gives concrete tips on issues such as improving the quality of a study despite tight budget constraints, and demonstrates how the results of randomized impact evaluations can inform policy. With contained modules, this one-of-a-kind guide is easy to navigate. It also includes invaluable references and a checklist of the common pitfalls to avoid. Provides the most up-to-date guide to running randomized evaluations of social programs, especially in developing countries Offers practical tips on how to complete high-quality studies in even the most challenging environments Self-contained modules allow for easy reference and flexible teaching and learning Comprehensive yet nontechnical

"Scaling Lean offers an invaluable blueprint for modeling startup success. You'll learn the essential metrics that measure the output of a working business model, give you the pulse of your company, communicate its health to investors, and enable you to make precise interventions when things go wrong." -Amazon.com.

This book provides the most comprehensive treatment to date of microeconomics, the analysis of individual-level data on the economic behavior of individuals or firms using regression methods for cross section and panel data. The book is oriented to the practitioner. A basic understanding of the linear regression model with matrix algebra is assumed. The text can be used for a microeconomics course, typically a second-year economics PhD course; for data-oriented applied microeconomics field courses; and as a reference work for graduate students and applied researchers who wish to fill in gaps in their toolkit. Distinguishing features of the book include emphasis on nonlinear models and robust inference, simulation-based estimation, and problems of complex survey data. The book makes frequent use of numerical examples based on generated data to illustrate the key models and methods. More substantially, it systematically integrates into the empirical illustrations based on seven large and exceptionally rich data sets.

Probability and Statistics have been widely used in various fields of science, including economics. Like advanced calculus and linear algebra, probability and statistics are indispensable mathematical tools in economics. Statistical inference in economics, namely econometric analysis, plays a crucial methodological role in modern economics, particularly in empirical studies in economics. This textbook covers probability theory and statistical theory in a coherent framework that will be useful in graduate studies in economics, statistics and related fields. As a most important feature, this textbook emphasizes intuition, explanations and applications of probability and statistics from an economic perspective. Request Inspection Copy

Introduction to Econometrics

Thirty-Five Rules for Clear and Persuasive Prose

Mostly Harmless Econometrics

The Goldilocks Challenge

A Path Forward

Mastering Market Analytics

From Joshua Angrist, winner of the Nobel Prize in Economics, and Jörn-Steffen Pischke, an accessible and fun guide to the essential tools of econometric research Applied econometrics, known to aficionados as 'metrics, is the original data science. 'Metrics encompasses the statistical methods economists use to untangle cause and effect in human affairs. Through accessible discussion and with a dose of kung fu-themed humor, Mastering 'Metrics presents the essential tools of econometric research and demonstrates why econometrics is exciting and useful. The five most valuable econometric methods, or what the authors call the Furious Five--random assignment, regression, instrumental variables, regression discontinuity designs, and differences in differences--are illustrated through well-crafted real-world examples (vetted for awesomeness by Kung Fu Panda's Jade Palace). Does health insurance make you healthier? Randomized experiments provide answers. Are expensive private colleges and selective public high schools better than more pedestrian institutions? Regression analysis and a regression discontinuity design reveal the surprising truth. When private banks teeter, and depositors take their money and run, should central banks step in to save them? Differences-in-differences analysis of a Depression-era banking crisis offers a response. Could arresting O. J. Simpson have saved his ex-wife's life? Instrumental variables methods instruct law enforcement authorities in how best to respond to domestic abuse. Wielding econometric tools with skill and confidence, Mastering 'Metrics uses data and statistics to illuminate the path from cause to effect. Shows why econometrics is important Explains econometric research through humorous and accessible discussion Outlines empirical methods central to modern econometric practice Works through interesting and relevant real-world examples

A rigorous but nontechnical treatment of major topics in urban economics. Lectures on Urban Economics offers a rigorous but nontechnical treatment of major topics in urban economics. To make the book accessible to a broad range of readers, the analysis is diagrammatic rather than mathematical. Although nontechnical, the book relies on rigorous economic reasoning. In contrast to the cursory theoretical development often found in other textbooks, Lectures on Urban Economics offers thorough and exhaustive treatments of models relevant to each topic, with the goal of revealing the logic of economic reasoning while also teaching urban economics. Topics covered include reasons for the existence of cities, urban spatial structure, urban sprawl and land-use controls, freeway congestion, housing demand and tenure choice, housing policies, local public goods and services, pollution, crime, and quality of life. Footnotes throughout the book point to relevant exercises, which appear at the back of the book. These 22 extended exercises (containing 125 individual parts) develop numerical examples based on the models analyzed in the chapters. Lectures on Urban Economics is suitable for undergraduate use, as background reading for graduate students, or as a professional reference for economists and scholars interested in the urban economics perspective.

Statistical methods in modern research increasingly entail developing, estimating and testing models for data. Rather than rigid methods of data analysis, the need today is for more flexible methods for modelling data. In this logical, easy-to-follow and exceptionally clear book, David Flora provides a comprehensive survey of the major statistical procedures currently used. His innovative model-based approach teaches you how to: Understand and choose the right statistical model to fit your data Match substantive theory and statistical models Apply statistical procedures hands-on, with example data analyses Develop and use graphs to understand data and fit models to data Work with statistical modeling principles using any software package Learn by applying, with input and output files for R, SAS, SPSS, and Mplus. Statistical Methods for the Social and Behavioural Sciences: A Model Based Approach is the essential guide for those looking to extend their understanding of the principles of statistics, and begin using the right statistical modeling method for their own data. It is particularly suited to second or advanced courses in statistical methods across the social and behavioural sciences.

Your success as a Software-as-a-Service (SaaS) company is completely dependent on acquiring and keeping users in your product. But if you're using traditional marketing tactics, you're likely struggling to scale your business quickly. That's because conventional marketing techniques focus on engaging prospects and users outside of the product.

Mastering Leadership

How to Deliver Personalized Product Experiences with a Product-Led Strategy

Methods and Applications

Economical Writing, Third Edition

A Practical Guide

Mastering Machine Learning with Python in Six Steps

Gain sharp insights into your data and solve real-world data science problems with R—from data munging to modeling and visualization About This Book Handle your data with precision and care for optimal business intelligence Restructure and transform your data to inform decision-making Packed with practical advice and tips to help you get to grips with data mining Who This Book Is For If you are a data scientist or R developer who wants to explore and optimize your use of R's advanced features and tools, this is the book for you. A basic knowledge of R is required, along with an understanding of database logic. What You Will Learn Connect to and load data from R's range of powerful databases Successfully fetch and parse structured and unstructured data with efficient R packages Define and build complex statistical models with glm Develop and train machine learning algorithms using supervised and unsupervised classification algorithms Discover how to visualize spatial data with R In Detail R is an essential language for sharp and successful data analysis. Its numerous features and ease of use make it a powerful way of mining, managing, and interpreting large sets of data. In a world where understanding big data has become key, by mastering R you will be able to deal with your data effectively and efficiently. This book will give you the guidance you need to build and develop your knowledge and expertise. Bridging the gap between theory and practice, this book will help you to understand and use data for a competitive advantage. Beginning with taking you through essential data mining and management tasks such as munging, fetching, cleaning, and restructuring, the book then explores different model designs and the core components of effective analysis. You will then discover how to optimize your use of machine learning algorithms for classification and recommendation systems beside the traditional and more recent statistical methods. Style and approach Covering the essential tasks and skills within data science, Mastering Data Analysis provides you with solutions to the challenges of data science. Each section gives you a theoretical overview before demonstrating how to put the theory to work with real-world use cases and hands-on examples.

Myoung-jae Lee reviews the three most popular methods (and their extensions) in applied economics and other social sciences: matching, regression discontinuity, and difference in differences. This book introduces the underlying econometric and statistical ideas, shows what is identified and how the identified parameters are estimated, and illustrates how they are applied with real empirical examples. Lee emphasizes how to implement the three methods with data; data and programs are provided in a useful online appendix. All readers—theoretical econometricians/statisticians, applied economists/social-scientists and researchers/students—will find something useful in the book from different perspectives.

Score of talented and dedicated people serve the forensic science community, performing vitally important work. However, they are often constrained by lack of adequate resources, sound policies, and national support. It is clear that change and advancements, both systematic and scientific, are needed in a number of forensic science disciplines to ensure the reliability of work, establish enforceable standards, and promote best practices with consistent application. Strengthening Forensic Science in the United States: A Path Forward prides a detailed plan for addressing these needs and suggests the creation of a new government entity, the National Institute of Forensic Science, to establish and enforce standards within the forensic science community. The benefits of improving and regulating the forensic science disciplines are clear: assisting law enforcement officials, enhancing homeland security, and reducing the risk of wrongful conviction and exonerated. Strengthening Forensic Science in the United States gives a full account of what is needed to advance the forensic science disciplines, including upgrading of systems and organizational structures, better training, widespread adoption of uniform and enforceable best practices, and mandatory certification and accreditation programs. While this book provides an essential call-to-action for congress and policy makers, it also serves as a vital tool for law enforcement agencies, criminal prosecutors and attorneys, and forensic science educators.

Use scikit-learn to apply machine learning to real-world problems About This Book Master popular machine learning models including k-nearest neighbors, random forests, logistic regression, k-means, naive Bayes, and artificial neural networks Learn how to build and evaluate performance of efficient models using scikit-learn Practical guide to master your basics and learn from real life applications of machine learning Who This Book Is For This book is intended for software engineers who want to understand how common machine learning algorithms work and develop an intuition for how to use them, and for data scientists who want to learn about the scikit-learn API. Familiarity with machine learning fundamentals and Python are helpful, but not required. What You Will Learn Review fundamental concepts such as bias and variance Extract features from categorical variables, text, and images Predict outcomes of continuous variables using linear regression and K Nearest Neighbors Classify documents and images using logistic regression and support vector machines Create ensembles of estimators using bagging and boosting techniques Discover hidden structures in data using K-Means clustering Evaluate the performance of machine learning systems in common tasks In Detail Machine learning is the buzzword bringing computer science and statistics together to build smart and efficient models. Using powerful algorithms and techniques offered by machine learning you can automate any analytical model. This book examines a variety of machine learning models including popular machine learning algorithms such as k-nearest neighbors, logistic regression, naive Bayes, k-means, decision trees, and artificial neural networks. It discusses data preprocessing, hyperparameter optimization, and ensemble methods. You will build systems that classify documents, recognize images, detect ads, and more. You will learn to use scikit-learn's API to extract features from categorical variables, text and images; evaluate model performance, and develop an intuition for how to improve your model's performance. By the end of this book, you will master all required concepts of scikit-learn to build efficient models at work to carry out advanced tasks with the practical approach. Style and approach This book is motivated by the belief that you do not understand something until you can describe it simply. Work through toy problems to develop your understanding of the learning algorithms and models, then apply your learnings to real-life problems.

Mastering 'Metrics (ARC)

The Effect

An Empiricist's Companion

An Introduction to Research Design and Causality

Can't Hurt Me

Mastering the Key Metrics for Startup Growth

Economics is not a field that is known for good writing. Charts, yes. Sparkling prose, no. Except, that is, when it comes to Dairde Nansen McCloskey. Her conversational and witty yet always clear style is a hallmark of her classic works of economic history, enlivening the dismal science and engaging readers well beyond the discipline. And now she's here to share the secrets of how it's done. Economical Writing is itself economical: a collection of thirty-five pithy rules for making your writing clear, concise, and effective. Proceeding from big-picture ideas to concrete values of good writing, after all, is not just a matter of taste—it's a product of adept intuition and a rigorous revision process. Debunking stale rules, warning us that "footnotes are nests for pedants," and offering an arsenal of readily applicable tools and methods, she shows writers of all levels of experience how to rethink the way they approach their work, and gives them the knowledge to turn mediocre prose into magic. At once efficient and digestible, hilarious and provocative, Economical Writing lives up to its promise. With McCloskey as our guide, pleasure to read.

Is your leadership a competitive advantage, or is it costing you? How do you know? Are you developing your leadership effectiveness at the pace of change? For most leaders today, complexity is outpacing their personal and collective development. Most leaders are in over their heads, whether they know it or not. The most successful organizations over time are the best led. While this has always been true, today escalating global complexity puts leadership effectiveness at a premium. Mastering Leadership involves developing the effectiveness of leaders—in a roadmap for optimal leadership features: Breakthrough research that connects increased leadership effectiveness with enhanced business performance The first fully integrated Universal Model of Leadership—one that integrates the best theory and research in the fields of Leadership and Organizational Development over the last half century A free, online self-assessment of your leadership, using the Leadership Circle Profile, visibly outlining how you are currently leading and how to develop even greater effectiveness The five stages in the evolution of leaders and cultures that develop at each of these stages Six leadership practices for evolving your leadership capability at a faster pace A map of your optimal path to greater leadership effectiveness Case stories that facilitate pragmatic application of this Leadership Development System to your particular situation This timeless, authoritative text provides a systemic approach for developing your senior leaders and the leadership system of your organization. It does not recommend quick fixes, but argues that real development requires a strategic, long-term, and intense Mastering Leadership offers a developmental pathway to bring forth the highest and best use of yourself, your life, and your leadership. By more meaningfully deploying all of who you are every day, individually and collectively, you will achieve a leadership legacy consistent with your highest aspirations.

Examine microeconomic theory as a way of looking at the world as MICROECONOMICS: AN INTUITIVE APPROACH WITH CALCULUS, 2E builds on the basic economic foundation of individual behavior. Each chapter contains two sections. The A sections introduce concepts using intuition, conversational writing, everyday examples, and graphs with a focus on mathematical counterparts. The B sections then cover the same concepts with precise, accessible mathematical analyses that assume one semester of single-variable calculus. The book offers flexible topical coverage of contemporary policy issues, or a path forward on business. Readers can use B sections to explore topics in greater depth. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

A new edition of the bestselling classic – published with a special introduction to mark its 10th anniversary This pioneering account sets out to understand the structure of the human brain – the place where mind meets matter. Until recently, the left hemisphere of our brain has been seen as the 'rational' side, the superior partner to the right. But is this distinction true? Drawing on a vast body of experimental research, Iain McGilchrist argues while our left brain makes for a wonderful servant, it is a very poor master. As he shows, it is the right side which is

colour and value.

Mastering 'Metrics

Running Randomized Evaluations

Matching, Regression Discontinuity, Difference in Differences, and Beyond

Probability and Statistics for Economists

Data Analysis for Business, Economics, and Policy

Loose-leaf Version for Microeconomics

The Effect: An Introduction to Research Design and Causality is about research design, specifically concerning research that uses observational data to make a causal inference. It is separated into two halves, each with different approaches to that subject. The first half goes through the concepts of causality, with very little in the way of estimation. It introduces the concept of identification thoroughly and clearly and discusses it as a process of trying to isolate variation that has a causal interpretation. Subjects include heavy emphasis on data-generating processes and causal diagrams. Concepts are demonstrated with a heavy emphasis on graphical intuition and the question of what we do to data. When we "add a control variable" what does that actually do? Key Features: • Extensive code examples in R, Stata, and Python • Chapters on overlooked topics in econometrics classes: heterogeneous treatment effects, simulation and power analysis, new cutting-edge methods, and uncomfortable ignored assumptions • An easy-to-read conversational tone • Up-to-date coverage of methods with fast-moving literatures like difference-in-differences

Entrepreneurs who dream of building the next Amazon, Facebook, or Google can take advantage of one of the most powerful economic engines the world has ever known: venture capital. To do so, you need to woo, impress, and persuade venture capitalists to take a risk on an unproven idea. That task is challenge enough. But choosing the right investor can be harder still. Even if you manage to get backing, you want your VC to be a partner, not some adversary who will undermine your vision in order to make a quick return. Jeffrey Bussgang is one of a few people who have played on both sides of this high-stakes game. By his early thirties, he had helped build two successful start-ups-one went public, the other was acquired. Now he draws on his experience and unique perspective on the "other side" as a venture capitalist helping entrepreneurs bring their dreams to fruition. Bussgang offers detailed insights, colorful stories, and practical advice gathered from his own experience as well as from interviews with dozens of the most successful players on both sides of the game, including Twitter's Jack Dorsey and LinkedIn's Reid Hoffman. He reveals how to get noticed, perfect a pitch, and negotiate a partnership that works for everyone. An insider's guide to the secrets of the world venture capital, Mastering the VC Game will prove invaluable for entrepreneurs seeking capital and successful partnerships.

Score your highest in econometrics? Easy. Econometrics can prove challenging for many students unfamiliar with the terms and concepts discussed in a typical econometrics course. Econometrics For Dummies eliminates that confusion with easy-to-understand explanations of important topics in the study of economics. Econometrics For Dummies breaks down this complex subject and provides you with an easy-to-follow course supplement to further refine your understanding of how econometrics works and how it can be applied in real-world situations. An excellent resource for anyone participating in a college or graduate level economics course Provides you with an easy-to-follow introduction to the techniques and applications of econometrics Helps you score high on exam day If you're seeking a degree in economics and looking for a plain-English guide to this often-intimidating course, Econometrics For Dummies has you covered.

In Mastering Market Analytics, Robert Kozlowski presents various measurement systems and marketing metrics, along with common mistakes made by organizations and managers in the process of measuring business activities, and illustrates how to avoid these mistakes. The new turbulent business environment has resulted in the decrease in effectiveness and efficiency of marketing activities, resulting in 50% of campaigns in social media remaining unnoticed by the public in 2016 alone. Response rates on emailing campaigns have dropped, one dollar invested in TV advertising generates only .32 cents of return, which all leaves the question of whether these activities are still effective in the contemporary world. What does effective marketing actually mean and which areas can be measured while assessing organizational effectiveness? Do sales and marketing benefit only the company or do they also generate value for customers? With over twenty years of experience in world markets, Kozlowski takes lessons and case studies from Eastern Europe to delve into 76 indicators, divided into four groups: sales, distribution, marketing communication, and e-commerce and social media, exploring from both the strategic and operational points of view. Linking applicable descriptions of the metrics with systems of measurement for these marketing activities and results, Kozlowski's work is of interest to marketing scholars and MBA students.

A Model-Based Approach

Economics

Master Your Mind and Defy the Odds - Clean Edition

Microeconomics

Anticipating Correlations

Mastering Distributed Tracing

An authoritative textbook based on the legendary economics course taught at the University of Chicago Price theory is a powerful analytical toolkit for measuring, explaining, and predicting human behavior in the marketplace. This incisive textbook provides an essential introduction to the subject, offering a diverse array of practical methods that empower students to learn by doing. Based on Economics 301, the legendary PhD course taught at the University of Chicago, the book emphasizes the importance of applying price theory in order to master its concepts. Chicago Price Theory features immersive chapter-length examples such as addictive goods, urban-property pricing, the consequences of prohibition, the value of a statistical life, and occupational choice. It looks at human behavior in the aggregate of an industry, region, or demographic group, but also provides models of individuals when they offer insights about the aggregate. The book explains the surprising answers that price theory can provide to practical questions about taxation, education, the housing market, government subsidies, and much more. Emphasizes the application of price theory, enabling students to learn by doing Features chapter-length examples such as addictive goods, urban-property pricing, the consequences of prohibition, and the value of a statistical life Supported by video lectures taught by Kevin M. Murphy and Gary Becker The video course enables students to learn the theory at home and practice the applications in the classroom

New York Times Bestseller Over 2.5 million copies sold *For David Goggins, childhood was a nightmare - poverty, prejudice, and physical abuse colored his days and haunted his nights. But through self-discipline, mental toughness, and hard work, Goggins transformed himself from a depressed, overweight young man with no future into a U.S. Armed Forces icon and one of the world's top endurance athletes. The only man in history to complete elite training as a Navy SEAL, Army Ranger, and Air Force Tactical Air Controller, he went on to set records in numerous endurance events, inspiring Outside magazine to name him The Fittest (Real) Man in America. In this curse-word-free edition of Can't Hurt Me, he shares his astonishing life story and reveals that most of us tap into only 40% of our capabilities. Goggins calls this The 40% Rule, and his story illuminates a path that anyone can follow to push past pain, demolish fear, and reach their full potential.*

Ensure students grasp the relevance of econometrics with Introduction to Econometrics – the text that connects modern theory and practice with motivating, engaging applications. The 4th Edition maintains a focus on currency, while building on the philosophy that applications should drive the theory, not the other way around. The text incorporates real-world questions and data, and methods that are immediately relevant to the applications. With very large data sets increasingly being used in economics and related fields, a new chapter dedicated to Big Data helps students learn about this growing and exciting area. This coverage and approach make the subject come alive for students and helps them to become sophisticated consumers of econometrics. Publisher's description.

The social sector provides services to a wide range of people throughout the world with the aim of creating social value. While doing good is great, doing it well is even better. These organizations, whether nonprofit, for-profit, or public, increasingly need to demonstrate that their efforts are making a positive impact on the world, especially as competition for funding and other scarce resources increases. This heightened focus on impact is positive: learning whether we are making a difference enhances our ability to address pressing social problems effectively and is critical to wise stewardship of resources. Demonstrating efficacy remains a big hurdle for most organizations. The Goldilocks Challenge provides a parsimonious framework for measuring the strategies and impact of social sector organizations. A good data strategy starts first with a sound theory of change that helps organizations decide what elements they should monitor and measure. With a theory of change and a sound understanding of the Goldilocks framework then puts forward four key principles, the CART principles: Credible data that are high quality and analyzed appropriately; Actionable data that will actually influence future decisions; Responsible data create more benefits than costs; and Transportable data build knowledge that can be used in the future and by others. Mary Kay Gugerty and Dean Karlan combine their extensive experience working with nonprofits, for-profits and government with their understanding of measuring effectiveness in this insightful guide to thinking about and implementing evidence-based change. This book is an invaluable asset for nonprofit, social enterprise and government leaders, managers, and funders-including anyone considering making a charitable contribution to a nonprofit-to ensure that these organizations get it "just right" by knowing what data to collect, how to collect it, how it can be analyzed, and drawing implications from the analysis. Everyone who wants to make positive change should focus on the top priority: using data to learn, innovate, and improve program implementation over time. Gugerty and Karlan show how.

Analyzing performance in microservices and complex systems

Lectures on Urban Economics

Right-Fit Evidence for the Social Sector

Mastering Data Analysis with R

Mastering Machine Learning with scikit-learn

Causal Inference

An accessible contemporary introduction to the methods for determining cause and effect in the social sciences 'Causation versus correlation has been the basis of arguments--economic and otherwise--since the beginning of time. Causal Inference: The Mixtape uses legit real-world examples that I found genuinely thought-provoking. It's rare that a book prompts readers to expand their outlook; this one did for me.' --Marvin Young (Young MC) Causal inference encompasses the tools that allow social scientists to determine what causes what. In a messy world, causal inference is what helps establish the causes and effects of the actions being studied--for example, the impact (or lack thereof) of increases in the minimum wage on employment, the effects of early childhood education on incarceration later in life, or the influence on economic growth of introducing malaria nets in developing regions. Scott Cunningham introduces students and practitioners to the methods necessary to arrive at meaningful answers to the questions of causation, using a range of modeling techniques and coding instructions for both the R and the Stata programming languages. Econometrics, the application of statistical principles to the quantification of economic models, is a compulsory component of European economics degrees. This text provides an introduction to this complex topic for students who are not outstandingly proficient in mathematics. It does this by providing the student with an analytical and an intuitive understanding of the classical linear regression model. Mathematical notation is kept simple and step-by-step verbal explanations of mathematical proofs are provided to facilitate a full understanding of the subject. The text also contains a large number of practical exercises for students to follow up and practice what they have learnt. Originally published in the USA, this new edition has been substantially updated and revised with the inclusion of new material on specification tests, binary choice models, tobit analysis, sample selection bias, nonstationary time series, and unit root tests and basic cointegration. The new edition is also accompanied by a website with Powerpoint slideshows giving a parallel graphical treatment of topics treated in the book, cross-section and time series data sets, manuals for practical exercises, and lecture note extending the text. This book looks at a number of topics in economic education, presenting multiple perspectives from those in the field to anyone interested in teaching economics. Using anecdotes, classroom experiments and surveys, the contributing authors show that, with some different or new techniques, teaching economics can be more engaging for students and help them better retain what they learned. Chapters cover a wide range of approaches to teaching economics, from interactive approaches such as utilizing video games and Econ Beats, to more rigorous examinations of government policies, market outcomes and exploring case studies from specific courses. Many of the chapters incorporate game theory and provide worked out examples of games designed to help students with intuitive retention of the material, and these games can be replicated in any economics classroom. While the exercises are geared towards college-level economics students, instructors can draw inspiration for course lectures from the various approaches taken here and utilize them at any level of teaching. This book will be very useful to instructors in economics interested in bringing innovative teaching methods into the classroom.

Applied econometrics, known to aficionados as 'metrics, is the original data science. 'Metrics encompasses the statistical methods economists use to untangle cause and effect in human affairs. Through accessible discussion and with a dose of kung fu-themed humor, Mastering 'Metrics presents the essential tools of econometric research and demonstrates why econometrics is exciting and useful. The five most valuable econometric methods, or what the authors call the Furious Five--random assignment, regression, instrumental variables, regression discontinuity designs, and differences in differences--are illustrated through well-crafted real-world examples (vetted for awesomeness by Kung Fu Panda's Jade Palace). Does health insurance make you healthier? Randomized experiments provide answers. Are expensive private colleges and selective public high schools better than more pedestrian institutions? Regression analysis and a regression discontinuity design reveal the surprising truth. When private banks teeter, and depositors take their money and run, should central banks step in to save them? Differences-in-differences analysis of a Depression-era banking crisis offers a response. Could arresting O. J. Simpson have saved his ex-wife's life? Instrumental variables methods instruct law enforcement authorities in how best to respond to domestic abuse. Wielding econometric tools with skill and confidence, Mastering 'Metrics uses data and statistics to illuminate the path from cause to effect. Shows why econometrics is important Explains econometric research through humorous and accessible discussion Outlines empirical methods central to modern econometric practice Works through interesting and relevant real-world examples

This book is a concise step-by-step guide to building and establishing the frameworks and models for the effective management and development of software requirements. It describes what great requirements must look like and who the real audience is for documentation. It then explains how to generate consistent, complete, and accurate requirements in exacting detail following a simple formula across the full life cycle from vague concept to detailed design-ready specifications. Mastering Software Project Requirements will enable business analysts and project managers to decompose high-level solutions into granular requirements and to elevate their performance through due diligence and the use of better techniques to meet the particular needs of a given project without sacrificing quality, scope, or project schedules. J. Ross Publishing offers an add-on at a nominal cost — Downloadable, customizable tools and templates ready for immediate implementation.

Explore fundamental to advanced Python 3 topics in six steps, all designed to make you a worthy practitioner. This updated version's approach is based on the "six degrees of separation" theory, which states that everyone and everything is a maximum of six steps away and presents each topic in two parts: theoretical concepts and practical implementation using suitable Python 3 packages. You'll start with the fundamentals of Python 3 programming language, machine learning evolution, and the system development frameworks. Key data mining/analysis concepts, such as exploratory analysis, feature dimension reduction, regressions, time series forecasting and their efficient implementation in Scikit-learn are covered as well. You'll also learn commonly used model diagnostic and tuning techniques. These include optimal probability cutoff point for class creation, variance, bias, bagging, boosting, ensemble voting, grid search, random search, Bayesian optimization, and the noise reduction technique for IoT data. Finally, you'll review advanced text mining techniques, recommender systems, neural networks, deep learning, reinforcement learning techniques and their implementation. All the code presented in the book will be available in the form of iPython notebooks to enable you to try out these examples and extend them to your advantage. What You'll Learn Understand machine learning development and frameworks Assess model diagnosis and tuning in machine learning Examine text mining, natural language processing (NLP), and recommender systems Review reinforcement learning and CNN Who This Book Is For Python developers, data engineers, and machine learning engineers looking to expand their knowledge or career into machine learning area.

The Econometric Analysis of Recurrent Events in Macroeconomics and Finance
A Venture Capital Insider Reveals How to Get from Start-up to IPO on Your Terms
Strengthening Forensic Science in the United States
A New Paradigm for Risk Management
The Master and His Emissary
Econometrics For Dummies

The global financial crisis highlighted the impact on macroeconomic outcomes of recurrent events like business and financial cycles, highs and lows in volatility, and crashes and recessions. At the most basic level, such recurrent events can be summarized using binary indicators showing if the event will occur or not. These indicators are constructed either directly from data or indirectly through models. Because they are constructed, they have different properties than those arising in microeconomics, and how one is to use them depends a lot on the method of construction. This book presents the econometric methods necessary for the successful modeling of recurrent events, providing valuable insights for policymakers, empirical researchers, and theorists. It explains why it is inherently difficult to forecast the onset of a recession in a way that provides useful guidance for active stabilization policy, with the consequence that policymakers should place more emphasis on making the economy robust to recessions. The book offers a range of econometric tools and techniques that researchers can use to measure recurrent events, summarize their properties, and evaluate how effectively economic and statistical models capture them. These methods also offer insights for developing models that are consistent with observed financial and real cycles. This book is an essential resource for students, academics, and researchers at central banks and institutions such as the International Monetary Fund.

Hayashi's Econometrics promises to be the next great synthesis of modern econometrics. It introduces first year Ph.D. students to standard graduate econometrics material from a modern perspective. It covers all the standard material necessary for understanding the principal techniques of econometrics from ordinary least squares through cointegration. The book is also distinctive in developing both time-series and cross-section analysis fully, giving the reader a unified framework for understanding and integrating results. Econometrics has many useful features and covers all the important topics in econometrics in a succinct manner. All the estimation techniques that could possibly be taught in a first-year graduate course, except maximum likelihood, are treated as special cases of GMM (generalized methods of moments). Maximum likelihood estimators for a variety of models (such as probit and tobit) are collected in a separate chapter. This arrangement enables students to learn various estimation techniques in an efficient manner. Eight of the ten chapters include a serious empirical application drawn from labor economics, industrial organization, domestic and international finance, and macroeconomics. These empirical exercises at the end of each chapter provide students a hands-on experience applying the techniques covered in the chapter. The exposition is rigorous yet accessible to students who have a working knowledge of very basic linear algebra and probability theory. All the results are stated as propositions, so that students can see the points of the discussion and also the conditions under which those results hold. Most propositions are proved in the text. For those who intend to write a thesis on applied topics, the empirical applications of the book are a good way to learn how to conduct empirical research. For the theoretically inclined, the no-compromise treatment of the basic techniques is a good preparation for more advanced theory courses.

In addition to econometric essentials, this book covers important new extensions as well as how to get standard errors right. The authors explain why fancier econometric techniques are typically unnecessary and even dangerous.

This textbook provides future data analysts with the tools, methods, and skills needed to answer data-focused, real-life questions; to carry out data analysis; and to visualize and interpret results to support better decisions in business, economics, and public policy. Data wrangling and exploration, regression analysis, machine learning, and causal analysis are comprehensively covered, as well as when, why, and how the methods work, and how they relate to each other. As the most effective way to communicate data analysis, running case studies play a central role in this textbook. Each case starts with an industry-relevant question and answers it by using real-world data and applying the tools and methods covered in the textbook. Learning is then consolidated by 360 practice questions and 120 data exercises. Extensive online resources, including raw and cleaned data and codes for all analysis in Stata, R, and Python, can be found at www.gabors-data-analysis.com.

Mastering 'metrics

Scaling Lean

The Path from Cause to Effect

An Integrated Framework for Breakthrough Performance and Extraordinary Business Results

Mastering the VC Game

Mastering Software Project Requirements

Financial markets respond to information virtually instantaneously. Each new piece of information influences the prices of assets and their correlations with each other, and as the system rapidly changes, so too do correlation forecasts. This fast-evolving environment presents econometricians with the challenge of forecasting dynamic correlations, which are essential inputs to risk measurement, portfolio allocation, derivative pricing, and many other critical financial activities. In Anticipating Correlations, Nobel Prize-winning economist Robert Engle introduces an important new method for estimating correlations for large systems of assets: Dynamic Conditional Correlation (DCC). Engle demonstrates the role of correlations in financial decision making, and addresses the economic underpinnings and theoretical properties of correlations and their relation to other measures of dependence. He compares DCC with other correlation estimators such as historical correlation, exponential smoothing, and multivariate GARCH, and he presents a range of important applications of DCC. Engle presents the asymmetric model and illustrates it using a multicountry equity and bond return model. He introduces the new FACTOR DCC model that blends factor models with the DCC to produce a model with the best features of both, and illustrates it using an array of U.S. large-cap equities. Engle shows how overinvestment in collateralized debt obligations, or CDOs, lies at the heart of the subprime mortgage crisis--and how the correlation models in this book could have foreseen the risks. A technical chapter of econometric results also is included. Based on the Econometric and Tinbergen Institutes Lectures, Anticipating Correlations puts powerful new forecasting tools into the hands of researchers, financial analysts, risk managers, derivative quants, and graduate students.

Understand how to apply distributed tracing to microservices-based architectures Key FeaturesA thorough conceptual introduction to distributed tracingAn exploration of the most important open standards in the spaceA how-to guide for code instrumentation and operating a tracing infrastructureBook Description Mastering Distributed Tracing will equip you to operate and enhance your own tracing infrastructure. Through practical exercises and code examples, you will learn how end-to-end tracing can be used as a powerful application performance management and comprehension tool. The rise of Internet-scale companies, like Google and Amazon, ushered in a new era of distributed systems operating on thousands of nodes across multiple data centers. Microservices increased that complexity, often exponentially. It is harder to debug these systems, track down failures, detect bottlenecks, or even simply understand what is going on. Distributed tracing focuses on solving these problems for complex distributed systems. Today, tracing standards have developed and we have much faster systems, making instrumentation less intrusive and data more valuable. Yuri Shkuro, the creator of Jaeger, a popular open-source distributed tracing system, delivers end-to-end coverage of the field in Mastering Distributed Tracing. Review the history and theoretical foundations of tracing; solve the data gathering problem through code instrumentation, with open standards like OpenTracing, W3C Trace Context, and OpenCensus; and discuss the benefits and applications of a distributed tracing infrastructure for understanding, and profiling, complex systems. What you will learnHow to get started with using a distributed tracing systemHow to get the most value out of end-to-end tracingLearn about open standards in the spaceLearn about code instrumentation and operating a tracing infrastructureLearn where distributed tracing fits into microservices as a core functionWho this book is for Any developer interested in testing large systems will find this book very revealing and in places, surprising. Every microservice architect and developer should have an insight into distributed tracing, and the book will help them on their way. System administrators with some development skills will also benefit. No particular programming language skills are required, although an ability to read Java, while non-essential, will help with the core chapters.

Like no other text for the intermediate microeconomics course, Goolsbee, Levitt, and Syverson's Microeconomics bridges the gap between today's theory and practice, with a strong empirical dimension that lets students tests theory and successfully apply it. With carefully crafted features and vivid examples, Goolsbee, Levitt, and Syverson's text helps answer two critical questions students ask, "Do people and firms really act as theory suggests?" and "How can someone use microeconomics in a practical way?" The authors teach in economics departments and business schools and are active empirical microeconomics researchers. Their grounding in different areas of empirical research allows them to present the evidence developed in the last 20 years that has tested and refined fundamental theories. Their teaching and professional experiences are reflected in an outstanding presentation of theories and applications.

Teaching Economics

Chicago Price Theory

Mastering Closure Data Analysis

Mastering Product Experience in SaaS

Business Metrics - Practice and Application