

Stream Analysis Pdf Book

Thank you utterly much for downloading Stream Analysis Pdf Book. Maybe you have knowledge that, people have see numerous time for their favorite books similar to this Stream Analysis Pdf Book, but end up in harmful downloads.

Rather than enjoying a fine book in the manner of a cup of coffee in the afternoon, then again they juggled subsequent to some harmful virus inside their computer. Stream Analysis Pdf Book is handy in our digital library an online right of entry to it is set as public suitably you can download it instantly. Our digital library saves in combination countries, allowing you to get the most less latency times to download any of our books in imitation of this one. Merely said, the Stream Analysis Pdf Book is universally compatible past any devices to read.



Statistics and Data Analysis for Financial Engineering Simon and Schuster

Now in its third edition, this classic book is widely considered the leading text on Bayesian methods, lauded for its accessible, practical approach to analyzing data and solving research problems. Bayesian Data Analysis, Third Edition continues to take an applied approach to analysis using up-to-date Bayesian methods. The authors—all leaders in the statistics community—introduce basic concepts from a data-analytic perspective before presenting advanced methods. Throughout the text, numerous worked examples drawn from real applications and research emphasize the use of Bayesian inference in practice. New to the Third Edition Four new chapters on nonparametric modeling Coverage of weakly informative priors and boundary-avoiding priors Updated discussion of cross-validation and predictive information criteria Improved convergence monitoring and effective sample size calculations for iterative simulation Presentations of Hamiltonian Monte Carlo, variational Bayes, and expectation propagation New and revised software code The book can be used in three different ways. For undergraduate students, it introduces Bayesian inference starting from first principles. For graduate students, the text presents effective current approaches to Bayesian modeling and computation in statistics and related fields. For researchers, it provides an assortment of Bayesian methods in applied statistics. Additional materials, including data sets used in the examples, solutions to selected exercises, and software instructions, are available on the book's web page.

Knowledge Discovery from Data Streams "O'Reilly Media, Inc."

The problem of privacy-preserving data analysis has a long history spanning multiple disciplines. As electronic data about individuals becomes increasingly detailed, and as technology enables ever more powerful collection and curation of these data, the need increases for a robust, meaningful, and mathematically rigorous definition of privacy, together with a computationally rich class of algorithms that satisfy this definition. Differential Privacy is such a definition. The Algorithmic Foundations of Differential Privacy starts out by motivating and discussing the meaning of differential privacy, and proceeds to explore the fundamental techniques for achieving differential privacy, and the application of these techniques in creative combinations, using the query-release problem as an ongoing example. A key point is

that, by rethinking the computational goal, one can often obtain far better results than would be achieved by methodically replacing each step of a non-private computation with a differentially private implementation. Despite some powerful computational results, there are still fundamental limitations. Virtually all the algorithms discussed herein maintain differential privacy against adversaries of arbitrary computational power -- certain algorithms are computationally intensive, others are efficient. Computational complexity for the adversary and the algorithm are both discussed. The monograph then turns from fundamentals to applications other than query-release, discussing differentially private methods for mechanism design and machine learning. The vast majority of the literature on differentially private algorithms considers a single, static, database that is subject to many analyses. Differential privacy in other models, including distributed databases and computations on data streams, is discussed. The Algorithmic Foundations of Differential Privacy is meant as a thorough introduction to the problems and techniques of differential privacy, and is an invaluable reference for anyone with an interest in the topic.

Learning to See Springer Science & Business Media

This open access book explores the dataspace paradigm as a best-effort approach to data management within data ecosystems. It establishes the theoretical foundations and principles of real-time linked dataspace as a data platform for intelligent systems. The book introduces a set of specialized best-effort techniques and models to enable loose administrative proximity and semantic integration for managing and processing events and streams. The book is divided into five major parts: Part I " Fundamentals and Concepts " details the motivation behind and core concepts of real-time linked dataspace, and establishes the need to evolve data management techniques in order to meet the challenges of enabling data ecosystems for intelligent systems within smart environments. Further, it explains the fundamental concepts of dataspace and the need for specialization in the processing of dynamic real-time data. Part II " Data Support Services " explores the design and evaluation of critical services, including catalog, entity management, query and search, data service discovery, and human-in-the-loop. In turn, Part III " Stream and Event Processing Services " addresses the design and evaluation of the specialized techniques created for real-time support services including complex event processing, event service composition, stream dissemination, stream matching, and approximate semantic matching. Part IV " Intelligent Systems and Applications " explores the use of real-time linked dataspace within real-world smart environments. In closing, Part V " Future Directions " outlines future research challenges for dataspace, data ecosystems, and intelligent systems. Readers will gain a detailed understanding of how the dataspace

paradigm is now being used to enable data ecosystems for intelligent systems within smart environments. The book covers the fundamental theory, the creation of new techniques needed for support services, and lessons learned from real-world intelligent systems and applications focused on sustainability. Accordingly, it will benefit not only researchers and graduate students in the fields of data management, big data, and IoT, but also professionals who need to create advanced data management platforms for intelligent systems, smart environments, and data ecosystems.

Lecture Notes | Total Quality Management Book PDF (BBA/MBA Management eBook Download) Springer Science & Business Media

This book provides comprehensive coverage of the field of outlier analysis from a computer science point of view. It integrates methods from data mining, machine learning, and statistics within the computational framework and therefore appeals to multiple communities. The chapters of this book can be organized into three categories: Basic algorithms: Chapters 1 through 7 discuss the fundamental algorithms for outlier analysis, including probabilistic and statistical methods, linear methods, proximity-based methods, high-dimensional (subspace) methods, ensemble methods, and supervised methods. Domain-specific methods: Chapters 8 through 12 discuss outlier detection algorithms for various domains of data, such as text, categorical data, time-series data, discrete sequence data, spatial data, and network data. Applications: Chapter 13 is devoted to various applications of outlier analysis. Some guidance is also provided for the practitioner. The second edition of this book is more detailed and is written to appeal to both researchers and practitioners. Significant new material has been added on topics such as kernel methods, one-class support-vector machines, matrix factorization, neural networks, outlier ensembles, time-series methods, and subspace methods. It is written as a textbook and can be used for classroom teaching.

Practical Binary Analysis McGraw Hill Professional

Running waters are enormously diverse, ranging from torrential mountain brooks, to large lowland rivers, to great river systems whose basins occupy subcontinents. While this diversity makes river ecosystems seem overwhelmingly complex, a central theme of this volume is that the processes acting in running waters are general, although the settings are often unique. The past two decades have seen major advances in our knowledge of the ecology of streams and rivers. New paradigms have emerged, such as the river continuum and nutrient spiraling. Community ecologists have made impressive advances in documenting the occurrence of species interactions. The importance of physical processes in rivers has attracted increased attention, particularly the areas of hydrology and geomorphology, and the inter-relationships between physical and biological factors have become better understood. And as is true for every area of ecology during the closing years of the twentieth century it has become apparent that the study of streams and rivers cannot be carried out by excluding the role of human activities, nor can we ignore the urgency of the need for conservation. These developments are brought together in *Stream Ecology: Structure and function of running waters*, designed to serve as a text for advanced undergraduate and graduate students, and as a reference book for specialists in stream ecology and related fields.

Stream Corridor Restoration National Technical Info Svc

This book primarily discusses issues related to the mining aspects of data streams and it is unique in its primary focus on the subject. This volume covers mining aspects of data streams comprehensively: each

contributed chapter contains a survey on the topic, the key ideas in the field for that particular topic, and future research directions. The book is intended for a professional audience composed of researchers and practitioners in industry. This book is also appropriate for advanced-level students in computer science.

Watch Me Play CRC Press

It is now a decade since the appearance of W. Diffie and M. E. Hellmann's startling paper, "New Directions in Cryptography". This paper not only established the new field of public-key cryptography but also awakened scientific interest in secret-key cryptography, a field that had been the almost exclusive domain of secret agencies and mathematical hobbyist. A number of excellent books on the science of cryptography have appeared since 1976. In the main, these books thoroughly treat both public-key systems and block ciphers (i. e. secret-key ciphers with no memory in the enciphering transformation) but give short shrift to stream ciphers (i. e. , secret-key ciphers with memory in the enciphering transformation). Yet, stream ciphers, such as those implemented by rotor machines, have played a dominant role in past cryptographic practice, and, as far as I can determine, remain still the workhorses of commercial, military and diplomatic secrecy systems. My own research interest in stream ciphers found a natural resonance in one of my doctoral students at the Swiss Federal Institute of Technology in Zurich, Rainer A. Rueppel. As Rainer was completing his dissertation in late 1984, the question arose as to where he should publish the many new results on stream ciphers that had sprung from his research.

Lecture Notes | Operations Management Book PDF (BBA/MBA Management eBook Download) Cambridge University Press

Streaming data is a big deal in big data these days. As more and more businesses seek to tame the massive unbounded data sets that pervade our world, streaming systems have finally reached a level of maturity sufficient for mainstream adoption. With this practical guide, data engineers, data scientists, and developers will learn how to work with streaming data in a conceptual and platform-agnostic way. Expanded from Tyler Akidau's popular blog posts "Streaming 101" and "Streaming 102", this book takes you from an introductory level to a nuanced understanding of the what, where, when, and how of processing real-time data streams. You'll also dive deep into watermarks and exactly-once processing with co-authors Slava Chernyak and Reuven Lax. You'll explore: How streaming and batch data processing patterns compare The core principles and concepts behind robust out-of-order data processing How watermarks track progress and completeness in infinite datasets How exactly-once data processing techniques ensure correctness How the concepts of streams and tables form the foundations of both batch and streaming data processing The practical motivations behind a powerful persistent state mechanism, driven by a real-world example How time-varying relations provide a link between stream processing and the world of SQL and relational algebra

Electron-Stream Interaction with Plasmas Simon and Schuster

The Microsoft Azure cloud is an ideal platform for data-intensive applications. Designed for productivity, Azure provides pre-built services that make collection, storage, and analysis much easier to implement and manage. Azure Storage, Streaming, and Batch Analytics teaches you how to design a reliable, performant, and cost-effective data infrastructure in Azure by progressively building a complete working analytics system. Summary The Microsoft Azure cloud is an ideal platform for data-intensive applications. Designed for productivity, Azure provides pre-built services that make collection, storage, and analysis much easier to implement and manage. Azure Storage, Streaming, and Batch Analytics teaches you how to design a reliable, performant, and cost-effective data infrastructure in Azure by progressively building a complete working analytics system. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Microsoft Azure provides dozens of services that simplify storing and processing data. These services are secure, reliable, scalable, and cost efficient. About the book Azure Storage, Streaming, and Batch Analytics shows you how to build state-of-the-art data solutions with tools from the Microsoft Azure platform. Read along to construct a cloud-native data warehouse, adding features like real-time data processing. Based on the Lambda architecture for big data, the design uses scalable services such as Event Hubs, Stream Analytics, and SQL

databases. Along the way, you'll cover most of the topics needed to earn an Azure data engineering certification. What's inside Configuring Azure services for speed and cost Constructing data pipelines with Data Factory Choosing the right data storage methods About the reader For readers familiar with database management. Examples in C# and PowerShell. About the author Richard Nuckolls is a senior developer building big data analytics and reporting systems in Azure. Table of Contents 1 What is data engineering? 2 Building an analytics system in Azure 3 General storage with Azure Storage accounts 4 Azure Data Lake Storage 5 Message handling with Event Hubs 6 Real-time queries with Azure Stream Analytics 7 Batch queries with Azure Data Lake Analytics 8 U-SQL for complex analytics 9 Integrating with Azure Data Lake Analytics 10 Service integration with Azure Data Factory 11 Managed SQL with Azure SQL Database 12 Integrating Data Factory with SQL Database 13 Where to go next

Outlier Analysis MIT Press

A systematic and practical research guide to coding verbal data in all its forms.

Stream Analysis Springer Science & Business Media

Every enterprise application creates data, whether it's log messages, metrics, user activity, outgoing messages, or something else. And how to move all of this data becomes nearly as important as the data itself. If you're an application architect, developer, or production engineer new to Apache Kafka, this practical guide shows you how to use this open source streaming platform to handle real-time data feeds. Engineers from Confluent and LinkedIn who are responsible for developing Kafka explain how to deploy production Kafka clusters, write reliable event-driven microservices, and build scalable stream-processing applications with this platform. Through detailed examples, you'll learn Kafka's design principles, reliability guarantees, key APIs, and architecture details, including the replication protocol, the controller, and the storage layer. Understand publish-subscribe messaging and how it fits in the big data ecosystem. Explore Kafka producers and consumers for writing and reading messages Understand Kafka patterns and use-case requirements to ensure reliable data delivery Get best practices for building data pipelines and applications with Kafka Manage Kafka in production, and learn to perform monitoring, tuning, and maintenance tasks Learn the most critical metrics among Kafka's operational measurements Explore how Kafka's stream delivery capabilities make it a perfect source for stream processing systems

Analysis and Design of Stream Ciphers MIT Press

In the data stream scenario, input arrives very rapidly and there is limited memory to store the input. Algorithms have to work with one or few passes over the data, space less than linear in the input size or time significantly less than the input size. In the past few years, a new theory has emerged for reasoning about algorithms that work within these constraints on space, time, and number of passes. Some of the methods rely on metric embeddings, pseudo-random computations, sparse approximation theory and communication complexity. The applications for this scenario include IP network traffic analysis, mining text message streams and processing massive data sets in general. Researchers in Theoretical Computer Science, Databases, IP Networking and Computer Systems are working on the data stream challenges.

Data Streams Simon and Schuster

The first of its kind—a Value Stream Mapping book written for those in service and office environments who need to streamline operations Value Stream Mapping is a practical, how-to guide that helps decision-makers improve value stream efficiency in virtually any setting, including construction, energy, financial service, government, healthcare, R&D, retail, and technology. It gives you the tools to address a wider range of important VSM issues than any other such book, including the psychology of change, leadership, creating teams, building consensus, and charter development. Karen Martin is principal

consultant for Karen Martin & Associates, LLC, instructor for the University of California, San Diego's Lean Enterprise program, and industry advisor to the University of San Diego's Industrial and Systems Engineering program. Mike Osterling provides support and leadership to manufacturing and non-manufacturing organizations on their Lean Transformation Journey. In a continuous improvement leadership role for six years, Mike played a key role in Square D Company's lean transformation in the 1990s.

The Algorithmic Foundations of Differential Privacy Simon and Schuster

Principal component analysis is probably the oldest and best known of the It was first introduced by Pearson (1901), techniques of multivariate analysis. and developed independently by Hotelling (1933). Like many multivariate methods, it was not widely used until the advent of electronic computers, but it is now well entrenched in virtually every statistical computer package. The central idea of principal component analysis is to reduce the dimensionality of a data set in which there are a large number of interrelated variables, while retaining as much as possible of the variation present in the data set. This reduction is achieved by transforming to a new set of variables, the principal components, which are uncorrelated, and which are ordered so that the first few retain most of the variation present in all of the original variables. Computation of the principal components reduces to the solution of an eigenvalue-eigenvector problem for a positive-semidefinite symmetric matrix. Thus, the definition and computation of principal components are straightforward but, as will be seen, this apparently simple technique has a wide variety of different applications, as well as a number of different derivations. Any feelings that principal component analysis is a narrow subject should soon be dispelled by the present book; indeed some quite broad topics which are related to principal component analysis receive no more than a brief mention in the final two chapters.

Visual Complex Analysis Cambridge University Press

Auditory Scene Analysis addresses the problem of hearing complex auditory environments, using a series of creative analogies to describe the process required of the human auditory system as it analyzes mixtures of sounds to recover descriptions of individual sounds. In a unified and comprehensive way, Bregman establishes a theoretical framework that integrates his findings with an unusually wide range of previous research in psychoacoustics, speech perception, music theory and composition, and computer modeling.

Grokking Streaming Systems CSU Open Press

A friendly, framework-agnostic tutorial that will help you grok how streaming systems work—and how to build your own! In *Grokking Streaming Systems* you will learn how to: Implement and troubleshoot streaming systems Design streaming systems for complex functionalities Assess parallelization requirements Spot networking bottlenecks and resolve back pressure Group data for high-performance systems Handle delayed events in real-time systems *Grokking Streaming Systems* is a simple guide to the complex concepts behind streaming systems. This friendly and framework-agnostic tutorial teaches you how to handle real-time events, and even design and build your own streaming job that's a perfect fit for your needs. Each new idea is carefully explained with diagrams, clear examples, and fun dialogue between perplexed personalities! About the technology Streaming systems minimize the time between receiving and processing event data, so they can deliver responses in real time. For applications in finance, security, and IoT where milliseconds matter, streaming systems are a requirement. And streaming is hot! Skills on platforms like Spark, Heron, and Kafka are in high demand. About the book *Grokking Streaming Systems* introduces real-time event streaming applications in clear, reader-friendly language. This engaging book illuminates core concepts like data parallelization, event windows, and backpressure without getting bogged down in framework-specific details. As you go, you'll build your own simple streaming tool from the ground up to make sure all the ideas and techniques stick. The helpful and entertaining illustrations make streaming systems come alive as you tackle relevant examples like real-time credit card fraud detection and monitoring IoT services. What's inside Implement and troubleshoot streaming systems Design streaming systems for complex functionalities Spot networking bottlenecks and resolve backpressure

Group data for high-performance systems About the reader No prior experience with streaming systems is assumed. Examples in Java. About the author Josh Fischer and Ning Wang are Apache Committers, and part of the committee for the Apache Heron distributed stream processing engine. Table of Contents PART 1 GETTING STARTED WITH STREAMING 1 Welcome to Grokking Streaming Systems 2 Hello, streaming systems! 3 Parallelization and data grouping 4 Stream graph 5 Delivery semantics 6 Streaming systems review and a glimpse ahead PART 2 STEPPING UP 7 Windowed computations 8 Join operations 9 Backpressure 10 Stateful computation 11 Wrap-up: Advanced concepts in streaming systems

Flow Cytometry Prentice Hall

Stop manually analyzing binary! Practical Binary Analysis is the first book of its kind to present advanced binary analysis topics, such as binary instrumentation, dynamic taint analysis, and symbolic execution, in an accessible way. As malware increasingly obfuscates itself and applies anti-analysis techniques to thwart our analysis, we need more sophisticated methods that allow us to raise that dark curtain designed to keep us out--binary analysis can help. The goal of all binary analysis is to determine (and possibly modify) the true properties of binary programs to understand what they really do, rather than what we think they should do. While reverse engineering and disassembly are critical first steps in many forms of binary analysis, there is much more to be learned. This hands-on guide teaches you how to tackle the fascinating but challenging topics of binary analysis and instrumentation and helps you become proficient in an area typically only mastered by a small group of expert hackers. It will take you from basic concepts to state-of-the-art methods as you dig into topics like code injection, disassembly, dynamic taint analysis, and binary instrumentation. Written for security engineers, hackers, and those with a basic working knowledge of C/C++ and x86-64, Practical Binary Analysis will teach you in-depth how binary programs work and help you acquire the tools and techniques needed to gain more control and insight into binary programs. Once you've completed an introduction to basic binary formats, you'll learn how to analyze binaries using techniques like the GNU/Linux binary analysis toolchain, disassembly, and code injection. You'll then go on to implement profiling tools with Pin and learn how to build your own dynamic taint analysis tools with libdft and symbolic execution tools using Triton. You'll learn how to: - Parse ELF and PE binaries and build a binary loader with libbfd - Use data-flow analysis techniques like program tracing, slicing, and reaching definitions analysis to reason about runtime flow of your programs - Modify ELF binaries with techniques like parasitic code injection and hex editing - Build custom disassembly tools with Capstone - Use binary instrumentation to circumvent anti-analysis tricks commonly used by malware - Apply taint analysis to detect control hijacking and data leak attacks - Use symbolic execution to build automatic exploitation tools With exercises at the end of each chapter to help solidify your skills, you'll go from understanding basic assembly to performing some of the most sophisticated binary analysis and instrumentation. Practical Binary Analysis gives you what you need to work effectively with binary programs and transform your knowledge from basic understanding to expert-level proficiency.

Kafka Streams in Action Manning Publications

The Book Operations Management Notes PDF Download (BBA/MBA Management Textbook 2023-24): Lecture Notes with Revision Guide (Operations Management Textbook PDF: Notes, Definitions & Explanations) covers revision notes from class notes & textbooks. Operations Management Lecture Notes PDF covers chapters' short notes with concepts, definitions and explanations for BBA, MBA exams. Operations Management Notes Book PDF provides a general course review for subjective exam, job's interview, and test preparation. The eBook Operations Management Lecture Notes PDF to download with abbreviations, terminology, and explanations is a revision guide for students' learning. Operations Management definitions PDF

download with free eBook's sample covers exam course material terms for distance learning and certification. Operations management Textbook Notes PDF with explanations covers subjective course terms for college and high school exam's prep. Operations management notes book PDF (MBA/BBA) with glossary terms assists students in tutorials, quizzes, viva and to answer a question in an interview for jobs. Operations Management Study Material PDF to download free e-Book's sample covers terminology with definition and explanation for quick learning. Operations Management lecture notes PDF with definitions covered in this quick study guide includes: Aggregate Planning Notes Design of Goods and Services Notes Forecasting Notes Human Resources and Job Design Notes Introduction to Operations Management Notes Inventory Management Notes Just-in-Time and Lean Production Systems Notes Layout Strategy Notes Location Strategies Notes Maintenance and Reliability Notes Managing Quality Notes Material Requirements Planning (MRP) and ERP Notes Operations Strategy in a Global Environment Notes Process Strategy Notes Project Management Notes Short-Term Scheduling Notes Supply-Chain Management Notes Operations Management Lecture Notes PDF covers terms, definitions, and explanations: ABC Analysis, ABC Inventory Control, Acceptable Quality Level (AQL), Acceptance Sampling (I), Acceptance Sampling (II), Activity Chart, Activity Map, Activity-on-Arrow (AOA), Activity-on-Node (AON), Activity, Adaptive Smoothing, Additive Manufacturing, Aggregate Plan, Aggregated Planning and Control, Agility, Alliances, Allowances, Andon, Annual Hours, Anthropometric Data, Anticipation Inventory, Appraisal Costs, Assembly Chart, Assembly Drawing, Assembly Line, Assembly-Line Balancing, Assignable Variation, Assignment Method, Attribute Inspection, Attributes of Quality, Automated Guided Vehicle (AGV), Automated Storage and Retrieval System (ASRS), Automatic Identification System (AIS), Autonomous Maintenance, Average Observed Time, and Average Outgoing Quality (AOQ). Operations Management Complete Notes PDF covers terms, definitions, and explanations: Back-Office, Backward Pass, Backward Scheduling, Balanced Scorecard (BSC), Balancing Loss, Bar Code, Basic Time, Batch Processes, Bath-Tub Curve, Behavioral Job Design, Benchmarking (I), Benchmarking (II), Bias, Big Data, Bill of Material (BOM) (I), Bill of Material (BOM) (II), Bill of Materials (BOM), Binary Variables, Blanket Order, Blueprinting, Bottleneck (I), Bottleneck (II), Bottleneck Time, Bottom-Up, Brainstorming, Break-Even Analysis, Breakdown Maintenance, Breakthrough Improvement, Broad definition of Operations, Buckets, Buffer Inventory, Build-to-Order (BTO), Bullwhip Effect (I), Bullwhip Effect (II), Business Continuity, Business Process Outsourcing (BPO), Business Process Re-Engineering (BPR), Business Processes, and Business Strategy. Operations Management Notes Book PDF covers terms, definitions, and explanations: C Chart, C pk, Capacity (I), Capacity (II), Capacity Analysis, Capacity Lagging, Carbon Footprint, Cause Effect Diagrams, Cause-and-Effect Diagram, Cell Layout, Center-of-Gravity Method, Central Limit Theorem, Centre-of-Gravity Method of Location, Channel Assembly, Chase Demand, Chase Strategy, Checklist, Closed-loop MRP System, Closed-Loop Supply Chain, Closed-Loop Supply Chains, Cluster Analysis, Clustering, Clusters, Co-Creation, Co-Opetition, Coefficient of Correlation, Coefficient of Determination, Collaborative Planning, Forecasting, and Replenishment (CPFR), and Combinatorial Complexity. Operations Management Notes Book PDF covers terms, definitions, and explanations: Objective Function, Off-Shoring, Office Layout, Open Sourcing, Operating

Characteristic (OC) Curve, Operations Chart, Operations Function, Operations Management (OM), Operations Management, Operations Managers, Operations Resource Capabilities, Operations Strategy, Optimistic Time, Optimized Production Technology (OPT), Order Fulfilment, Order-Winners, Ordering Cost, Outline Process Map, Outsourcing (I), Outsourcing (II), Outsourcing (III), and Overall Equipment Effectiveness (OEE). And many more definitions and explanations!

Coding Streams of Language Bushra Arshad

In talking about contemporary media, we often use a language of newness, applying words like “revolution” and “disruption.” Yet, the emergence of new sound media technologies and content—from the earliest internet radio broadcasts to the development of algorithmic music services and the origins of podcasting—are not a disruption, but a continuation of the century-long history of radio. Today’s most innovative media makers are reintroducing forms of audio storytelling from radio’s past. *Sound Streams* is the first book to historicize radio-internet convergence from the early ’90s through the present, demonstrating how so-called new media represent an evolutionary shift that is nevertheless historically consistent with earlier modes of broadcasting. Various iterations of internet radio, from streaming audio to podcasting, are all new radio practices rather than each being a separate new medium: radio is any sound media that is purposefully crafted to be heard by an audience. Rather than a particular set of technologies or textual conventions, web-based broadcasting combines unique practices and features and ideas from radio history. In addition, there exists a distinctive conversationality and reflexivity to radio talk, including a propensity for personal stories and emotional disclosure, that suits networked digital media culture. What media convergence has done is extend and intensify radio’s logics of connectivity and sharing; sonically mediated personal expression intended for public consideration abounds in online media networks. *Sound Streams* marks a significant contribution to digital media and internet studies. Its mix of cultural history, industry research, and genre and formal analysis, especially of contemporary audio storytelling, will appeal to media scholars, radio and podcast practitioners, audio journalism students, and dedicated podcast fans.

Streaming Data Springer Nature

Now in its second edition, this book focuses on practical algorithms for mining data from even the largest datasets.