Toy World Case Study Solution

This treatment of structured techniques in systems development is based on the author's actual project management experience. The author helps readers make a clear distinction between logical and physical systems, showing how the logical system is completely developed before the physical system starts. The presentation is descriptive and fairly elementary, requiring only some programming experience in a high-level language such as COBOL, FORTRAN or PASCAL. Topics covered include computer-based information systems, structured analysis, structured design, structured implementation, and contemporary issues in system development. The book contains many case studies.

Boosting Learning in the Primary Classroom is your one-stop practical guide to understanding the physical development of children and how this affects their ability to learn. Not only does it explain the reasons behind the theories but provides over 75 practical tips that really work in the classroom. The book is based on a successful five-step approach to help children acquire the skills needed to manage at school and daily life. It works by being able to pinpoint a problem, assists others in recognising the impact that difficulty is having to the child and then provides strategies to develop that child's specific skills. Using the latest medical research and established occupational therapy techniques to obtain great results, this approach provides teachers with the tools to use different knowledge and strategies to engage children in the learning process. Key ideas explored include: Exploring the reasons for poor handwriting Increasing Disability Awareness The link between body posture and concentration Dyspraxia in a school setting Play develops learning Understanding sensory behaviour By providing teachers with an understanding of physical child development and the impact this has in the classroom, this book demonstrates how teachers can use this knowledge to boost the learning of their primary-aged children. It encourages teachers to identify improvements in the child's progress of not just educational learning targets but also in physical motor development, using real life case studies, latest theory and tried & tested occupational therapy methods to help every child improve.

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

This book contains 28 research papers selected from the 140 papers presented at the Berlin conference in July 1989. They focus principally on the relationship between the design of information systems on the one hand, and the design of work processes on the other. Important normative questions that need to be addressed in this context include: Where should the (re)design process begin? Should work and organization design drive information system design, or the other way round? Perhaps they are best not separated in this way? Should an information system be designed in a way that enables people to change the distribution of tasks between themselves and the information system? How can the different interests of the various stakeholders be accommodated in an appropriate design of the socio-technical system? Who should perform what tasks in the design process? This book reports on research and experiments with design processes aimed at answering these basic questions.

QFINANCE

Mind and Cognition

Business Optimization Using Mathematical Programming

Readings in Computer-generated Music

Implementing End-to-End Real-Time Data Pipelines: From Ingest to Machine Learning

Principles and Application

Automation and Human Performance

Written as a result of a seven year research project using computational intelligence techniques for solving mineral processing problems at the U.S. Bureau of Mines, this book is about intelligent, adaptive process control. It brings together ideas from the field of computational intelligence , a part of the larger field of artificial intelligence, including fuzzy mathematics, genetic algorithms, and neural networks and uses these ideas to develop a generic architecture for accomplishing adaptive process control. In the development of this architecture, the requisite tools are described and then demonstrated on a number of problems. Moreover, most of the examples are of interest in industrial settings (although some simple examples are provided in the beginning so that the reader can focus on technique and not be overburdened with the complexity of the problems being solved.) The focus of Practical Applications of Computational Intelligence for Adaptive Control is on practical applications. It provides practicing engineers and scientists with the information they need to solve process control problems in industry and academia. If the reader is interested in solving difficult control problems or interested in the mechanics of basic computational intelligence techniques, then this book is an excellent place to start.

Mobile Commerce is considered to be the next-generation e-commerce, since it enables users to access the WWW from anywhere in the world at any time. Because of this, m-commerce has to rely on new technologies, services and business models. Its potential emerges from the fact that the Internet has become an essential component in all aspects of our lives. On the other hand, mobile phones and PDAs have become an indispensable part of our daily routine as

sources of all kinds of information and services and, especially, as a permanently available interface to our surroundings.

Current academic philosophy is being challenged from several angles. Subdisciplinary specialisations often make it challenging to articulate philosophy's relevance for the societal questions of our day.Additionally, the success of the 'scientific method' puts pressure on philosophers to articulate their methods and specify how these can be successful. How does philosophical progress come about? What can philosophy contribute to our understanding of today's world? Moreover, can it also contribute to resolving urgent societal challenges, such as anthropogenic climate change? This edited volume evaluates the place of philosophy in the age of science. It addresses three related sub-themes: philosophical progress, philosophical method and philosophy's societal relevance. Fourteen authors engage with these sub-themes, focusing on the topics of their philosophical expertise, such as the philosophy of religion, evolutionary ethics and the nature of free will. In doing so, they explore their methods of enquiry, and look at how progress in their research comes about.

One of the goals of artificial intelligence (AI) is creating autonomous agents that must make decisions based on uncertain and incomplete information. The goal is to design rational agents that must take the best action given the information available and their goals. Decision Theory Models for Applications in Artificial Intelligence: Concepts and Solutions provides an introduction to different types of decision theory techniques, including MDPs, POMDPs, Influence Diagrams, and Reinforcement Learning, and illustrates their application in artificial intelligence. This book provides insights into the advantages and challenges of using decision theory models for developing intelligent systems.

UML 2000 - The Unified Modeling Language: Advancing the Standard

The DITTET Collection

Modern Quantum Field Theory - Proceedings Of The International Colloquium

Inquiries into Philosophical Progress, Method, and Societal Relevance

Developments in Current Game-Based Learning Design and Deployment

Occupational therapy strategies that really work with pupils

QFINANCE: The Ultimate Resource (5th edition) is the first-step reference for the finance professional or student of finance. Its coverage and author quality reflect a fine blend of practitioner and academic expertise, whilst providing the reader with a thorough education in the may facets of finance.

Modern optimization approaches have attracted an increasing number of scientists, decision makers, and researchers. As new issues in this field emerge, different optimization methodologies must be developed and implemented. The Handbook of Research on Emergent Applications of Optimization Algorithms is an authoritative reference source for the latest scholarly research on modern optimization techniques for solving complex problems of global optimization and their applications in economics and engineering. Featuring coverage on a broad range of topics and perspectives such as hybrid systems, non-cooperative games, and cryptography, this publication is ideally designed for students, researchers, and engineers interested in emerging developments in optimization algorithms.

There is perhaps no facet of modern society where the influence of computer automation has not been felt. Flight management systems for pilots, diagnostic and surgical aids for physicians, navigational displays for drivers, and decision-aiding systems for air-traffic controllers, represent only a few of the numerous domains in which powerful new automation technologies have been introduced. The benefits that have been reaped from this technological revolution have been many. At the same time, automation has not always worked as planned by designers, and many problems have arisen--from minor inefficiencies of operation to large-scale, catastrophic accidents. Understanding how humans interact with automation is vital for the successful design of new automated systems that are both safe and efficient. The influence of automation technology on human performance has often been investigated in a fragmentary, isolated manner, with investigators conducting disconnected studies in different domains. There has been little contact between these endeavors, although principles gleaned from one domain may have implications for another. Also, with a few exceptions, the research has tended to be empirical and only theory-driven. In recent years, however, various groups of investigators have begun to examine human performance in automated systems in general and to develop theories of human interaction with automation technology. This book presents the current theories and assesses the impact of automation on different aspects of human performance. Both basic and applied research is presented to highlight the general principles of human-computer interaction in several domains where automation technologies are widely implemented. The major premise is that a broad-based, theory-driven approach will have significant implications for the effective design of both current and future automation technologies. This volume will be of considerable value to researchers in human

Recent innovations and new technologies in education have altered the way teachers approach instruction and learning and can provide countless advantages. The pedagogical value of specific technology tools and the cumulative effects of technology exposure on student learning over time are two areas that need to be explored to better determine the improvements needed in the modern classroom. Advanced Methodologies and Technologies in Modern Education Delivery provides emerging research on educational models in the continually improving classroom. While highlighting the challenges facing modern in-service and pre-service teachers when educating students, readers will learn information on new methods in curriculum development, instructional design, and learning assessments to implement within their classrooms. This book is a vital resource for pre-service and in-service teachers, teacher education professionals, higher education administrative professionals, and researchers interested in new curriculum development.

Advances in Intelligent Data Analysis VIII

An Introduction with Case Studies and Solutions in Various Algebraic Modeling Languages

Enhancing the Safety of Our Toys

The Practitioners' Guide

Systems Analysis, Design and Development Issues

Proceedings of TAMoCo 2009

Citrix MetaFrame XP

Learn how easy it is to apply sophisticated statistical and machine learning methods to real-world problems when you build on top of the Google Cloud Platform

(GCP). This hands-on guide shows developers entering the data science field how to implement an end-to-end data pipeline, using statistical and machine learning methods and tools on GCP. Through the course of the book, you'll work through a sample business decision by employing a variety of data science approaches. Follow along by implementing these statistical and machine learning solutions in your own project on GCP, and discover how this platform provides a transformative and more collaborative way of doing data science. You'll learn how to: Automate and schedule data ingest, using an App Engine application Create and populate a dashboard in Google Data Studio Build a real-time analysis pipeline to carry out streaming analytics Conduct interactive data exploration with Google BigQuery Create a Bayesian model on a Cloud Dataproc cluster Build a logistic regression machine-learning model with Spark Compute time-aggregate features with a Cloud Dataflow pipeline Create a high-performing prediction model with TensorFlow Use your deployed model as a microservice you can access from both batch and real-time pipelines

This proceedings contains the lectures in which outstanding experts came together to discuss the latest exciting developments in this field.

Drawing Programs: The Theory and Practice of Schematic Functional Programming describes a diagrammatic (schematic) approach to programming. It introduces a sophisticated tool for programmers who would rather work with diagrams than with text. The language is a complete functional language that has evolved into a representation scheme that is unique. The result is a simple coherent description of the process of modelling with the computer. The experience of using this tool is introduced gradually with examples, small projects and exercises. The new computational theory behind the tool is interspersed between these practical descriptions so that the reasons for the activity can be understood and the activity, in turn, illustrates some elements of the theory Access to the tool, its source code and a set of examples that range from the simple to the complex is free (see www.springer.com/978-1-84882-617-5). A description of the tool's construction and how it may be extended is also given. The authors' experience with undergraduates and graduates who have the understanding and skill of a functional language learnt through using schema have also shown an enhanced ability to program in other computer languages. Readers are provided with a set of concepts that will ensure a good robust program design and, what is more important, a path to error free programming.

Most textbooks on modern heuristics provide the reader with detailed descriptions of the functionality of single examples like genetic algorithms, genetic programming, tabu search, simulated annealing, and others, but fail to teach the underlying concepts behind these different approaches. The author takes a different approach in this textbook by focusing on the users' needs and answering three fundamental questions: First, he tells us which problems modern heuristics are expected to perform well on, and which should be left to traditional optimization methods. Second, he teaches us to systematically design the "right" modern heuristic for a particular problem by providing a coherent view on design elements and working principles. Third, he shows how we can make use of problem-specific knowledge for the design of efficient and effective modern heuristics that solve not only small toy problems but also perform well on large real-world problems. This book is written in an easy-to-read style and it is aimed at students and practitioners in computer science, operations research and information systems who want to understand modern heuristics and are interested in a guide to their systematic design and use. This book is written in an easy-to-read style and it is aimed at students and practitioners in computer science, operations research and information systems who want to understand modern heuristics and are interested in a guide to their systematic design and use. This book is written in an easy-to-read style and it is aimed at students and practitioners in computer science, operations research and information systems who want to understand modern heuristics and are interested in a guide to their systematic design and use.

Unified Modeling Language: Systems Analysis, Design and Development Issues

Drawing Programs: The Theory and Practice of Schematic Functional Programming

Practical Applications of Computational Intelligence for Adaptive Control

Practical Natural Language Processing

Handbook of Research on Emergent Applications of Optimization Algorithms

The Ultimate Resource

Business Information Systems

This book constitutes the refereed proceedings of the 4th International Semantic Web Conference, ISWC 2005, held in Galway, Ireland, in November 2005. The 54 revised full academic papers and 17 revised industrial papers presented together with abstracts of 3 invited talks were carefully reviewed and selected from a total of 217 submitted papers to the academic track and 30 to the industrial track. The research papers address all current issues in the field of the semantic Web, ranging from theoretical aspects to various applications. The industrial track contains papers on applications in particular industrial sectors, new technology for building applications, and methodological and feasibility aspects of building industrial applications that incorporate semantic Web technology. Short descriptions of the top five winning applications submitted to the Semantic Web Challenge competition conclude the volume.

UML is a large and complex language, with many features in need of refinement or clarification, and there are different views about how to use UML to build systems. This book sheds light on such issues, by illustrating how UML can be used successfully in practice as well as identifying various problematic aspects of UML and suggesting possible solutions.

Computer Applications -- Arts and Humanities.

The two-volume set LNBIP 353 and 354 constitutes the proceedings of the 22nd International Conference on Business Information Systems, BIS 2019, held in Seville, Spain, in June 2019. The theme of the BIS 2019 was "Data Science for Business Information Systems", inspiring researchers to share theoretical and practical knowledge of the different aspects related to Data Science in enterprises. The 67 papers presented in these proceedings were carefully reviewed and selected from 223 submissions. The contributions were organized in topical sections as follows: Part I: Big Data and Data Science; Artificial Intelligence; ICT Project Management; and Smart Infrastructure. Part II: Social Media and Web-based Systems; and Applications, Evaluations and Experiences.

Boston Studies in the Philosophy of Science

Theory and Applications

Information System, Work and Organization Design

Design of Modern Heuristics

An Anthology

Applying Engineering Thermodynamics: A Case Study Approach

Conceptual Modeling

Over the past century, educational psychologists and researchers have posited many theories to explain how individuals learn, i.e. how they acquire, organize and deploy knowledge and skills. The 20th century can be considered the century of psychology on learning and related fields of interest (such as motivation, cognition, metacognition etc.) and it is fascinating to see the various mainstreams of learning, remembered and forgotten over the 20th century and note that basic assumptions of early theories survived several paradigm shifts of psychology and epistemology. Beyond folk psychology and its naïve theories of learning, psychological learning theories can be grouped into some basic categories, such as behaviorist learning theories, connectionist learning theories, cognitive learning theories, constructivist learning theories, and social learning theories. Learning theories are not limited to psychology and related fields of interest but rather we can find the topic of learning in various disciplines, such as philosophy and epistemology, education, information science, biology, and ⬚ as a result of the emergence of computer technologies ⬚ especially also in the field of computer sciences and artificial intelligence. As a consequence, machine learning struck a chord in the 1980s and became an important field of the learning sciences in general. As the learning sciences became more specialized and complex, the various fields of interest were widely spread and separated from each other; as a consequence, even presently, there is no comprehensive overview of the sciences of learning or the central theoretical concepts and vocabulary on which researchers rely. The Encyclopedia of the Sciences of Learning provides an up-to-date, broad and authoritative coverage of the specific terms mostly used in the sciences of learning and its related fields, including relevant areas of instruction, pedagogy, cognitive sciences, and especially machine learning and knowledge engineering. This modern compendium will be an indispensable source of information for scientists, educators, engineers, and technical staff active in all fields of learning. More specifically, the Encyclopedia provides fast access to the most relevant theoretical terms provides up-to-date, broad and authoritative coverage of the most important theories within the various fields of the learning sciences and adjacent sciences and communication technologies; supplies clear and precise explanations of the theoretical terms, cross-references to related entries and up-to-date references to important research and publications. The Encyclopedia also contains biographical entries of individuals who have substantially contributed to the sciences of learning; the entries are written by a distinguished panel of researchers in the various fields of the learning sciences.

This book constitutes the refereed proceedings of the 8th International Conference on Intelligent Data Analysis, IDA 2009, held in Lyon, France, August 31 - September 2, 2009. The 33 revised papers, 18 full oral presentations and 15 poster and short oral presentations, presented were carefully reviewed and selected from almost 80 submissions. All current aspects of this interdisciplinary field are addressed; for example interactive tools to guide and support data analysis in complex scenarios, increasing availability of automatically collected data, tools that intelligently support and assist human analysts, how to control clustering results and isotonic classification trees. In general the areas covered include statistics, machine learning, data mining, classification and pattern recognition, clustering, applications, modeling, and interactive dynamic data visualization.

This textbook provides a strong foundation in the basic thermodynamics needed to analyze real-world engineering applications of thermodynamics in the field of energy systems. Written in a format readable to students new to the subject, this book will also help entrepreneurs venturing into the world of energy and power without a background in mechanical engineering.This book presents the basic theories of thermodynamics by focusing on the application of the subject matter to the most common applications of thermodynamics. It takes real-world problems from the author's over 40 years of experience as a practical, professional engineer and provides in-depth solutions to each problem using concepts the student has learned from earlier chapters. The case studies provide both examples of how thermodynamics is used in state-of-the-art tools to solve the case studies' problems, as well as ideas for future energy-efficient systems.

Discusses the design and deployment of MetaFrame XP environments, covering topics including printing, replicated data stores, and security.

Analytics of Spatial Information Technology

Data Science Bookcamp

Decision Theory Models for Applications in Artificial Intelligence: Concepts and Solutions

Lead Paint, the Consumer Product Safety Commission, and Toy Safety Standards : Hearings Before a Subcommittee of the Committee on Appropriations, United States Senate, One Hundred Tenth Congress, First Session, Special Hearings, June 18, 2007, Washington, DC [i.e. Chicago, IL], September 12, 2007, Washington, DC.

The Semantic Web ⬚ ISWC 2005

Advanced Technical Design Guide

Third International Conference York, UK, October 2-6, 2000 Proceedings

Learn data science with Python by building five real-world projects! Experiment with card game predictions, tracking disease outbreaks, and more, as you build a flexible and intuitive understanding of data science. In Data Science Bookcamp you will learn: - Techniques for computing and plotting probabilities - Statistical analysis using Scipy - How to organize datasets with clustering algorithms - How to visualize complex multi-variable datasets - How to train a decision tree machine learning algorithm In Data Science Bookcamp you'll test and build your knowledge of Python with the kind of open-ended problems that professional data scientists work on every day. Downloadable data sets and thoroughly-explained solutions help you lock in what you've learned, building your confidence and making you ready for an exciting new data science career. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology A data science project has a lot of moving parts, and it takes practice and skill to get all the code, algorithms, datasets, formats, and visualizations working together harmoniously. This unique book guides you through five realistic projects, including tracking disease outbreaks from news headlines, analyzing social networks, and finding relevant patterns in ad click data. About the book Data Science Bookcamp doesn't stop with surface-level theory and toy examples. As you work through each project, you'll learn how to troubleshoot common problems like missing data, messy data, and algorithms that don't quite fit the model you're building. You'll appreciate the detailed setup instructions and the fully explained solutions that highlight common failure points. In the end, you'll be confident in your skills because you can see the results. What's inside - Web scraping - Organize datasets with clustering algorithms - Visualize complex multi-variable datasets - Train a decision tree machine learning algorithm About the reader For readers who know the basics of Python. No prior data science or machine learning skills required. About the author Leonard Apeltsin is the Head of Data Science at Anomaly, where his team applies advanced analytics to uncover healthcare fraud, waste, and abuse. Table of Contents CASE STUDY 1 FINDING THE WINNING STRATEGY IN A CARD GAME 1 Computing probabilities using Python 2 Plotting probabilities using Matplotlib 3 Running random simulations in NumPy 4 Case study 1 solution CASE STUDY 2 ASSESSING ONLINE AD CLICKS FOR SIGNIFICANCE 5 Basic probability and statistical analysis using SciPy 6 Making predictions using the central limit theorem and SciPy 7 Statistical hypothesis testing 8 Analyzing tables using Pandas 9 Case study 2 solution CASE STUDY 3 TRACKING DISEASE OUTBREAKS USING NEWS HEADLINES 10 Clustering data into groups 11 Geographic location visualization and analysis 12 Case study 3 solution CASE STUDY 4 USING ONLINE JOB POSTINGS TO IMPROVE YOUR DATA SCIENCE RESUME 13 Measuring text similarities 14 Dimension reduction of matrix data 15 NLP analysis of large text datasets 16 Extracting text from web pages 17 Case study 4 solution CASE STUDY 5 PREDICTING FUTURE FRIENDSHIPS FROM SOCIAL NETWORK DATA 18 An introduction to graph theory and network analysis 19 Dynamic graph theory techniques for node ranking and social network analysis 20 Network-driven supervised machine learning 21 Training linear classifiers with logistic regression 22 Training nonlinear classifiers with decision tree techniques 23 Case study 5 solution

Educational gaming is becoming more popular at universities, in the military, and in private business. Multidisciplinary research which explores the cognitive and psychological aspects that underpin successful educational video games is therefore necessary to ensure proper curriculum design and positive learning outcomes. Developments in Current Game-Based Learning Design and Deployment highlights the latest research from professionals and researchers working in the fields of educational games development, e-learning, multimedia, educational psychology, and information technology. It promotes an in-depth understanding of the multiple factors and challenges inherent to the design and integration of game-based Learning environments.

Written from scratch for MetaFrame XP, this book details all aspects of MetaFrame XP environments, including farm design, printing, application installation, security, licensing, NFuse, load management, coexistence with MetaFrame 1.8, and integration with Novell. (Computers)

Numerical calculations are inevitably required in the field of hydrogeology and play a significant role in dealing with its various aspects. As often as not, students are seen struggling while solving numerical problems based on hydrogeology, as they find difficulty in identifying the correct concept behind the problem and the formula that can be applied to it. Also, there is a dearth of books, which help the readers in solving numerical problems of varied difficulty level and enable them to have a firm grounding in the subject of hydrogeology. The book Hydrogeology: Problems with Solutions fills this void in the finest way, and as desired, chiefly focuses on the sequential steps involved in solving the problems based on hydrogeology. It concisely covers the fundamental concepts, advanced principles and applications of hydrogeological tasks rather than overemphasising the theoretical aspects. The text comprises sixty solved hydrogeological problems, which are logically organised into ten chapters, including hydrological cycle, morphometric analysis, hydrological properties, groundwater flow, well hydraulics, well design and construction, groundwater management, seawater intrusion, groundwater exploration and groundwater quality. The practice of pedagogy of hydrogeology in yesteryears was a two-tier approach of theoretical principles with toy problems and in-situ case studies for research start-up. This book bridges the gap between routine problem-solving and state-of-the-practice for future. The book is primarily intended for the undergraduate and postgraduate students of Earth Sciences, Civil Engineering, Water Resources Engineering, Hydrogeology and Hydrology. It also serves as an excellent handy reference for all professionals.KEY FEATURES • Key Concept succinctly explores the models, methods and theoretical concepts related to each problem. • Necessary equations and formulae are specified. • Appendices and Glossary are included, leaving no scope to refer any other book. • Bibliography broadens the scope of the book.

Origin and Evolution of Viruses

4th International Semantic Web Conference, ISWC 2005, Galway, Ireland, November 6-10, 2005, Proceedings

8th International Symposium on Intelligent Data Analysis, IDA 2009, Lyon, France, August 31 - September 2, 2009, Proceedings

Location Theory and Decision Analysis

22nd International Conference, BIS 2019, Seville, Spain, June 26–28, 2019, Proceedings, Part I

Finance Essentials

Advanced Methodologies and Technologies in Modern Education Delivery

This book offers a unique compilation of papers in mathematics and physics from Freeman Dyson's 50 years of activity and research. These are the papers that Dyson considers most worthy of preserving, and many of them are classics. The papers are accompanied by commentary explaining the context from which they originated and the subsequent history of the problems that either were solved or left unsolved. This collection offers a connected narrative of the developments in mathematics and physics in which the author was involved, beginning with his professional life as a student of G. H. Hardy.

Employing state-of-the art quantitative models and case studies, Location Theory and Decision Analysis provides the methodologies behind the siting of such facilities as transportation terminals, warehouses, housing, landfills, state parks and industrial plants. Through its extensive methodological review, the book serves as a primer for more advanced texts on spatial analysis, including the monograph on Location, Transport and Land-Use by the same author. Given the rapid changes over the last decade, the Second Edition includes new analytic contributions as well as software survey of analytics and spatial information technology. While the First Edition served the professional community well, the Second Edition has substantially expanded its emphasis for classroom use of the volume. Extensive pedagogic materials have been added, going from the fundamental principles to open-ended exercises, including solutions to selected problems. The text is of value to engineering and business programs that offer courses in Decision and Risk Analysis, Muticriteria Decision-Making, and Facility Location and Layout. It should also be of interest to public policy programs that use geographic Information Systems and satellite imagery to support their analyses.

Designed for upper-level undergraduate and graduate students, this text provides the reader with an overview of the complex, sophisticated and sometimes conflicting developments in theories of mind that have taken place over the last 40 years.

*New viral diseases are emerging continuously. Viruses adapt to new environments at astounding rates. Genetic variability of viruses jeopardizes vaccine efficacy. For many viruses mutants resistant to antiviral agents or host immune responses arise readily, for example, with HIV and influenza. These variations are all of utmost importance for human and animal health as they have prevented us from controlling these epidemic pathogens. This book focuses on the mechanisms that viruses use to evolve, survive and cause disease in their hosts. Covering human, animal, plant and bacterial viruses, it provides both the basic foundations for the evolutionary dynamics of viruses and specific examples of emerging diseases. * NEW - methods to establish relationships among viruses and the mechanisms that affect virus evolution * UNIQUE - combines theoretical concepts in evolution with detailed analyses of the evolution of important virus groups * SPECIFIC - Bacterial, plant, animal and human viruses are compared regarding their interation with their hosts*

Philosophy in the Age of Science?

New Trends in Disruptive Technologies, Tech Ethics and Artificial Intelligence

35th International Conference, ER 2016, Gifu, Japan, November 14-17, 2016, Proceedings

Boosting Learning in the Primary Classroom

HYDROGEOLOGY: PROBLEMS WITH SOLUTIONS

Concepts and Solutions

PC Mag

This book constitutes the refereed proceedings of the Third International Conference on the Unified Modeling Language, 2000, held in York, UK in October 2000. The 36 revised full papers presented together with two invited papers and three panel outlines were carefully reviewed and selected from 102 abstracts and 82 papers submitted. The book offers topical sections on use cases, enterprise applications, applications, roles, OCL tools, meta-modeling, behavioral modeling, methodology, actions and constraints, patterns, architecture, and state charts.

Many books and courses tackle natural language processing (NLP) problems with toy use cases and well-defined datasets. But if you want to build, iterate, and scale NLP systems in a business setting and tailor them for particular industry verticals, this is your guide. Software engineers and data scientists will learn how to navigate the maze of options available at each step of the journey. Through the course of the book, authors Sowmya Vajjala, Bodhisattwa Majumder, Anuj Gupta, and Harshit Surana will guide you through the process of building real-world NLP solutions embedded in larger product setups. You'll learn how to adapt your solutions for different industry verticals such as healthcare, social media, and retail. With this book, you'll: Understand the wide spectrum of problem statements, tasks, and solution approaches within NLP Implement and evaluate different NLP applications using machine learning and deep learning methods Fine-tune your NLP solution based on your business problem and industry vertical Evaluate various algorithms and approaches for NLP product tasks, datasets, and stages Produce software solutions following best practices around release, deployment, and DevOps for NLP systems Understand best practices, opportunities, and the roadmap for NLP from a business and product leader's perspective

Collated by Scott Moeller of Cass Business School, this collection brings together the informative articles a budding finance practitioner needs to operate effectively in today's corporate environment. Bringing together core finance knowledge and cutting-edge research topics in an engaging and effective way, this text is the ideal companion for all practitioners and students of finance. You will find insights into the practical applications of theory in key areas such as balance sheets and cash flow, financial regulation and compliance, funding and investment, governance and ethics, mergers and acquisitions, and operations and performance. Contributors to this collection include some of the leading experts in their respective fields: Aswath Damodaran, Harold Bierman, Jr, Andreas Jobst, Frank J. Fabozzi, Ian Bremmer, Javier Estrada, Marc J. Epstein, Henrik Cronqvist, Daud Vicary Abdullah, Meziane Lasfer, Dean Karlan, Norman Marks, Seth Armitage, and many others. In this collection you will discover: * Over 80 best-practice articles, providing the best guidance on issues ranging from risk management and capital structure optimization through to market responses to M&A transactions and general corporate governance * Over 65 checklists forming step-by-step guides to essential tasks, from hedging interest rates to calculating your total economic capital * 55 carefully selected calculations and ratios to monitor firms' financial health * A fully featured business and finance dictionary with over 5,000 definitions

This book constitutes the refereed proceedings of the 345h International Conference on Conceptual Modeling, ER 2016, held in Gifu, Japan, in November 2016. The 23 full and 18 short papers presented together with 3 keynotes were carefully reviewed and selected from 113 submissions. The papers are organized in topical sections on Analytics and Conceptual Modeling; Conceptual Modeling and Ontologies; Requirements Engineering; Advanced Conceptual Modeling; Semantic Annotations; Modeling and Executing Business Processes; Business Process Management and Modeling; Applications and

Experiments of Conceptual Modeling; Schema Mapping; Conceptual Modeling Guidance; and Goal Modeling.
Selected Papers of Freeman Dyson with Commentary
Five real-world Python projects
Citrix MetaFrame XP Advanced Technical Design Guide
Proceedings of the IFIP TC9/WG9.1 Working Conference on Information System, Work and Organization Design, Berlin, GDR, 10-13 July, 1989
Data Science on the Google Cloud Platform
A Comprehensive Guide to Building Real-World NLP Systems
Encyclopedia of the Sciences of Learning
This book presents a structured approach to formulate, model, and solve mathematical optimization problems for a wide range of real world situations. Among the problems covered are production, distribution and supply chain planning, scheduling, vehicle routing, as well as cutting stock, packing, and nesting. The optimization techniques used to solve the problems are primarily linear, mixed-integer linear, nonlinear, and mixed integer nonlinear programming. The book also covers important considerations for solving real-world optimization problems, such as dealing with valid inequalities and symmetry during the modeling phase, but also data interfacing and visualization of results in a more and more digitized world. The broad range of ideas and approaches presented helps the reader to learn how to model a variety of problems from process industry, paper and metals industry, the energy sector, and logistics using mathematical optimization techniques.
Techniques and Applications for Mobile Commerce
Structured Techniques of System Analysis, Design, and Implementation