Acces PDF Pdf Download Guide Installation 1401 Python

This is likewise one of the factors by obtaining the soft documents of this **Pdf Download Guide Installation 1401 Python** by online. You might not require more epoch to spend to go to the book foundation as capably as search for them. In some cases, you likewise do not discover the publication Pdf Download Guide Installation 1401 Python that you are looking for. It will enormously squander the time.

However below, as soon as you visit this web page, it will be thus unconditionally easy to get as well as download guide Pdf Download Guide Installation 1401 Python

It will not consent many grow old as we notify before. You can do it though take action something else at house and even in your workplace. suitably easy! So, are you question? Just exercise just what we give under as well as review **Pdf Download Guide Installation 1401 Python** what you once to read!

KEY=INSTALLATION - KRISTA ROMAN

Python Machine Learning

Packt Publishing Ltd **Unlock deeper insights into Machine Leaning with this vital guide to cutting-edge predictive analytics About This Book Leverage Python's most powerful open-source libraries for deep learning, data wrangling, and data visualization Learn effective strategies and best practices to improve and optimize machine learning systems and algorithms Ask – and answer – tough questions of your data with robust statistical models, built for a range of datasets Who This Book Is For If you want to find out how to use Python to start answering critical questions of your data, pick up Python Machine Learning – whether you want to get started from scratch or want to extend your data science knowledge, this is an essential and unmissable resource. What You Will Learn Explore how to use different machine learning models to ask different questions of your data Learn how to build neural networks using Keras and Theano Find out how to write clean and elegant Python code that will optimize the strength of your algorithms Discover how to embed your machine learning model in a web application for increased accessibility Predict continuous target outcomes using regression analysis Uncover hidden patterns and structures in data with clustering Organize data using effective pre-processing techniques Get to grips with sentiment analysis to delve deeper into textual and social media data In Detail Machine learning and predictive analytics are transforming the way businesses and other organizations operate. Being able to understand trends and patterns in complex data is critical to success, becoming one of the key strategies for unlocking growth in a challenging contemporary marketplace. Python can help you deliver key insights into your data – its unique capabilities as a language let you build sophisticated algorithms and statistical models that can reveal new perspectives and answer key questions that are vital for success. Python Machine Learning gives you access to the world of predictive analytics and demonstrates why Python is one of the world's leading data science languages. If you want to ask better questions of data, or need to improve and extend the capabilities of your machine learning systems, this practical data science book is invaluable. Covering a wide range of powerful Python libraries, including scikit-learn, Theano, and Keras, and featuring guidance and tips on everything from sentiment analysis to neural networks, you'll soon be able to answer some of the most important questions facing you and your organization. Style and approach Python Machine Learning connects the fundamental theoretical principles behind machine learning to their practical application in a way that focuses you on asking and answering the right questions. It walks you through the key elements of Python and its powerful machine learning libraries, while demonstrating how to get to grips with a range of statistical models.**

Microsoft Dynamics 365 Extensions Cookbook

Packt Publishing Ltd **More than 80 recipes to help you leverage the various extensibility features available for Microsoft Dynamics and solve problems easily About This Book Customize, configure, and extend the vanilla features of Dynamics 365 to deliver bespoke CRM solutions fit for any organization Implement business logic using point-and-click configuration, plugins, and client-side scripts with MS Dynamics 365 Built a DevOps pipeline as well as Integrate Dynamics 365 with Azure and other platforms Who This Book Is For This book is for developers, administrators, consultants, and power users who want to learn about best practices when extending Dynamics 365 for enterprises. You are expected to have a basic understand of the Dynamics CRM/365 platform. What You Will Learn Customize, configure, and extend Microsoft Dynamics 365 Create business process automation Develop client-side extensions to add features to the Dynamics 365 user interface Set up a security model to securely manage data with Dynamics 365 Develop and deploy clean code plugins to implement a wide range of custom behaviors Use third-party applications, tools, and patterns to integrate Dynamics 365 with other platforms Integrate with Azure, Java, SSIS, PowerBI, and Octopus Deploy Build an end-to-end DevOps pipeline for Dynamics 365 In Detail Microsoft Dynamics 365 is a powerful tool. It has many unique features that empower organisations to bridge common business challenges and technology pitfalls that would usually hinder the adoption of a CRM solution. This book sets out to enable you to harness the power of Dynamics 365 and cater to your unique circumstances. We start this book with a no-code configuration chapter and explain the schema, fields, and forms modeling techniques. We then move on to server-side and client-side custom code extensions. Next, you will see how best to integrate Dynamics 365 in a DevOps pipeline to package**

and deploy your extensions to the various SDLC environments. This book also covers modern libraries and integration patterns that can be used with Dynamics 365 (Angular, 3 tiers, and many others). Finally, we end by highlighting some of the powerful extensions available. Throughout we explain a range of design patterns and techniques that can be used to enhance your code quality; the aim is that you will learn to write enterprise-scale quality code. Style and approach This book takes a recipe-based approach, delivering practical examples and use cases so that you can identify the best possible approach to extend your Dynamics 365 deployment and tackle your specific business problems.

Data Pipelines Pocket Reference

O'Reilly Media **Data pipelines are the foundation for success in data analytics. Moving data from numerous diverse sources and transforming it to provide context is the difference between having data and actually gaining value from it. This pocket reference defines data pipelines and explains how they work in today's modern data stack. You'll learn common considerations and key decision points when implementing pipelines, such as batch versus streaming data ingestion and build versus buy. This book addresses the most common decisions made by data professionals and discusses foundational concepts that apply to open source frameworks, commercial products, and homegrown solutions. You'll learn: What a data pipeline is and how it works How data is moved and processed on modern data infrastructure, including cloud platforms Common tools and products used by data engineers to build pipelines How pipelines support analytics and reporting needs Considerations for pipeline maintenance, testing, and alerting**

Internet of Things From Hype to Reality

The Road to Digitization

Springer **This book comprehensively describes an end-to-end Internet of Things (IoT) architecture that is comprised of devices, network, compute, storage, platform, applications along with management and security components. It is organized into five main parts, comprising of a total of 11 chapters. Part I presents a generic IoT reference model to establish a common vocabulary for IoT solutions. This includes a detailed description of the Internet protocol layers and the Things (sensors and actuators) as well as the key business drivers to realize the IoT vision. Part II focuses on the IoT requirements that impact networking protocols and provides a layer-by-layer walkthrough of the protocol stack with emphasis on industry progress and key gaps. Part III introduces the concept of Fog computing and describes the drivers for the technology, its constituent elements, and how it relates and differs from Cloud computing. Part IV discusses the IoT services platform, the cornerstone of the solution followed by the Security functions and requirements. Finally, Part V provides a treatment of the topic of connected ecosystems in IoT along with practical applications. It then surveys the latest IoT standards and discusses the pivotal role of open source in IoT. "Faculty will find well-crafted questions and answers at the end of each chapter, suitable for review and in classroom discussion topics. In addition, the material in the book can be used by engineers and technical leaders looking to gain a deep technical understanding of IoT, as well as by managers and business leaders looking to gain a competitive edge and understand innovation opportunities for the future." Dr. Jim Spohrer, IBM "This text provides a very compelling study of the IoT space and achieves a very good balance between engineering/technology focus and business context. As such, it is highly-recommended for anyone interested in this rapidly-expanding field and will have broad appeal to a wide cross-section of readers, i.e., including engineering professionals, business analysts, university students, and professors." Professor Nasir Ghani, University of South Florida**

Basic Computer Games

Microcomputer Edition

Graph-Theoretic Problems and Their New Applications

MDPI **Graph theory is an important area of applied mathematics with a broad spectrum of applications in many fields. This book results from aSpecialIssue in the journal Mathematics entitled "Graph-Theoretic Problems and Their New Applications". It contains 20 articles covering a broad spectrum of graph-theoretic works that were selected from 151 submitted papers after a thorough refereeing process. Among others, it includes a deep survey on mixed graphs and their use for solutions ti scheduling problems. Other subjects include topological indices, domination numbers of graphs, domination games, contraction mappings, and neutrosophic graphs. Several applications of graph theory are discussed, e.g., the use of graph theory in the context of molecular processes.**

Python Machine Learning Blueprints

Packt Publishing

Sams Teach Yourself Python Programming for Raspberry Pi in 24 Hours

Provides step-by-step lessons that teach Python programming on Raspberry Pi, covering such topics as working with modules, writing scripts, using loops, creating functions, and exploring object-oriented programming.

Create GUI Applications with Python & Qt5 (PySide2 Edition)

The hands-on guide to making apps with Python

Martin Fitzpatrick **Building desktop applications doesn't have to be difficult. Using Python & Qt5 you can create fully functional desktop apps in minutes. This is the 4th Edition of Create GUI Applications, updated for 2020 & PySide2 Starting from the very basics, this book takes you on a tour of the key features of PySide you can use to build real-life applications. Learn the fundamental building blocks of PySide applications — Widgets, Layouts & Signals and learn how PySide uses the event loop to handle and respond to user input. Design beautiful UIs with Qt Designer and customize the look and feel of your applications with Qt Style Sheets and custom widgets. Use Qt's MVC-like ModelViews framework to connect data sources to your widgets, including SQL databases, numpy and pandas data tables, to build-data driven application. Visualize data using matplotlib & PyQtGraph and connect with external data sources to build live dashboards. Learn how to use threads and processes to manage long-running tasks and communicate with external services. Parse data and visualize the output in logs and progress bars. The book includes usability and architectural tips to help you build maintainable and usable PySide2 applications from the start. Finally, once your application is ready to be released, discover how to package it up into professional-quality installers, ready to ship. The book includes - 665 pages of hands-on PySide2 exercises - 211 code examples to experiment with - Includes 4 example apps - Compatible with Python 3.4+ - Code free to reuse in your own projects**

Web Development with Node and Express

Leveraging the JavaScript Stack

"O'Reilly Media, Inc." Learn how to build dynamic web applications with Express, a key component of the Node/JavaScript development stack. In this hands-on guide, author Ethan Brown teaches you the fundamentals through the development of a fictional application that exposes a public website and a RESTful API. You'll also learn web architecture best practices to help you build single-page, multi-page, and hybrid web apps with Express. Express strikes a balance between a robust framework and no framework at all, allowing you a free hand in your architecture choices. With this book, frontend and backend engineers familiar with JavaScript will discover new ways of looking at web development. Create webpage templating system for rendering dynamic data Dive into request and response objects, middleware, and URL routing Simulate a production environment for testing and development Focus on persistence with document databases, particularly MongoDB Make your resources available to other programs with RESTful APIs Build secure apps with authentication, authorization, and HTTPS Integrate with social media, geolocation, and other third-party services Implement a plan for launching and maintaining your app Learn critical debugging skills This book covers Express 4.0.

Programming in Python 3

A Complete Introduction to the Python Language

Pearson Education **Python 3 is the best version of the language yet: It is more powerful, convenient, consistent, and expressive than ever before. Now, leading Python programmer Mark Summerfield demonstrates how to write code that takes full advantage of Python 3's features and idioms. The first book written from a completely "Python 3" viewpoint, Programming in Python 3 brings together all the knowledge you need to write any program, use any standard or third-party Python 3 library, and create new library modules of your own. Summerfield draws on his many years of Python experience to share deep insights into Python 3 development you won't find anywhere else. He begins by illuminating Python's "beautiful heart": the eight key elements of Python you need to write robust, high-performance programs. Building on these core elements, he introduces new topics designed to strengthen your practical expertise—one concept and hands-on example at a time. This book's coverage includes Developing in Python using procedural, object-oriented, and functional programming paradigms Creating custom packages and modules Writing and reading binary, text, and XML files, including optional compression, random access, and text and XML parsing Leveraging advanced data types, collections, control structures, and functions Spreading program workloads across multiple processes and threads Programming SQL databases and key-value DBM files Utilizing Python's regular expression mini-language and**

module Building usable, efficient, GUI-based applications Advanced programming techniques, including generators, function and class decorators, context managers, descriptors, abstract base classes, metaclasses, and more Programming in Python 3 serves as both tutorial and language reference, and it is accompanied by extensive downloadable example code—all of it tested with the final version of Python 3 on Windows, Linux, and Mac OS X.

History of Nordic Computing 2

Second IFIP WG 9.7 Conference, HiNC 2, Turku, Finland, August 21-23, 2007, Revised Selected Papers

Springer Science & Business Media **The First Conference on the History of Nordic Computing (HiNC1) was organized in Trondheim, in June 2003. The HiNC1 event focused on the early years of computing, that is the years from the 1940s through the 1960s, although it formally extended to year 1985. In the preface of the proceedings of HiNC1, Janis Bubenko, Jr. , John Impagliazzo, and Arne Sølvberg describe well the peculiarities of early Nordic c- puting [1]. While developing hardware was a necessity for the first professionals, quite soon the computer became an industrial product. Computer scientists, among others, grew increasingly interested in programming and application software. P- gress in these areas from the 1960s to the 1980s was experienced as astonishing. The developments during these decades were taken as the focus of HiNC2. During those decades computers arrived to every branch of large and medium-sized businesses and the users of the computer systems were no longer only computer s- cialists but also people with other main duties. Compared to the early years of comp- ing before 1960, where the number of computer projects and applications was small, capturing a holistic view of the history between the 1960s and the 1980s is conside- bly more difficult. The HiNC2 conference attempted to help in this endeavor.**

Python for Data Analysis

Data Wrangling with Pandas, NumPy, and IPython

"O'Reilly Media, Inc." **Get complete instructions for manipulating, processing, cleaning, and crunching datasets in Python. Updated for Python 3.6, the second edition of this hands-on guide is packed with practical case studies that show you how to solve a broad set of data analysis problems effectively. You'll learn the latest versions of pandas, NumPy, IPython, and Jupyter in the process. Written by Wes McKinney, the creator of the Python pandas project, this book is a practical, modern introduction to data science tools in Python. It's ideal for analysts new to Python and for Python programmers new to data science and scientific computing. Data files and related material are available on GitHub. Use the IPython shell and Jupyter notebook for exploratory computing Learn basic and advanced features in NumPy (Numerical Python) Get started with data analysis tools in the pandas library Use flexible tools to load, clean, transform, merge, and reshape data Create informative visualizations with matplotlib Apply the pandas groupby facility to slice, dice, and summarize datasets Analyze and manipulate regular and irregular time series data Learn how to solve real-world data analysis problems with thorough, detailed examples**

Molecular Modeling in Drug Design

MDPI **Since the first attempts at structure-based drug design about four decades ago, molecular modelling techniques for drug design have developed enormously, along with the increasing computational power and structural and biological information of active compounds and potential target molecules. Nowadays, molecular modeling can be considered to be an integral component of the modern drug discovery and development toolbox. Nevertheless, there are still many methodological challenges to be overcome in the application of molecular modeling approaches to drug discovery. The eight original research and five review articles collected in this book provide a snapshot of the state-of-the-art of molecular modeling in drug design, illustrating recent advances and critically discussing important challenges. The topics covered include virtual screening and pharmacophore modelling, chemoinformatic applications of artificial intelligence and machine learning, molecular dynamics simulation and enhanced sampling to investigate contributions of molecular flexibility to drug–receptor interactions, the modeling of drug–receptor solvation, hydrogen bonding and polarization, and drug design against protein–protein interfaces and membrane protein receptors.**

Python for Kids

A Playful Introduction To Programming

No Starch Press **Python is a powerful, expressive programming language that's easy to learn and fun to use! But books about learning to program in Python can be kind of dull, gray, and boring, and that's no fun for anyone. Python for Kids brings Python to life and brings you (and your parents) into the world of programming. The ever-patient Jason R. Briggs will guide you through the basics as you experiment with unique (and often hilarious) example programs that feature ravenous monsters, secret agents, thieving ravens, and more. New terms are defined; code is colored,**

dissected, and explained; and quirky, full-color illustrations keep things on the lighter side. Chapters end with programming puzzles designed to stretch your brain and strengthen your understanding. By the end of the book you'll have programmed two complete games: a clone of the famous Pong and "Mr. Stick Man Races for the Exit"—a platform game with jumps, animation, and much more. As you strike out on your programming adventure, you'll learn how to: –Use fundamental data structures like lists, tuples, and maps –Organize and reuse your code with functions and modules –Use control structures like loops and conditional statements –Draw shapes and patterns with Python's turtle module –Create games, animations, and other graphical wonders with tkinter Why should serious adults have all the fun? Python for Kids is your ticket into the amazing world of computer programming. For kids ages 10+ (and their parents) The code in this book runs on almost anything: Windows, Mac, Linux, even an OLPC laptop or Raspberry Pi!

Functional Data Analysis with R and MATLAB

Springer Science & Business Media **The book provides an application-oriented overview of functional analysis, with extended and accessible presentations of key concepts such as spline basis functions, data smoothing, curve registration, functional linear models and dynamic systems Functional data analysis is put to work in a wide a range of applications, so that new problems are likely to find close analogues in this book The code in R and Matlab in the book has been designed to permit easy modification to adapt to new data structures and research problems**

Concepts Of Programming Languages

Pearson Education India

Modern Vim

Craft Your Development Environment with Vim 8 and Neovim

Pragmatic Bookshelf **Turn Vim into a full-blown development environment using Vim 8's new features and this sequel to the beloved bestseller Practical Vim. Integrate your editor with tools for building, testing, linting, indexing, and searching your codebase. Discover the future of Vim with Neovim: a fork of Vim that includes a built-in terminal emulator that will transform your workflow. Whether you choose to switch to Neovim or stick with Vim 8, you'll be a better developer. A serious tool for programmers and web developers, no other text editor comes close to Vim for speed and efficiency. Make Vim the centerpiece of a Unix-based IDE as you discover new ways to work with Vim 8 and Neovim in more than 20 hands-on tips. Execute tasks asynchronously, allowing you to continue in Vim while linting, grepping, building a project, or running a test suite. Install plugins to be loaded on startup - or on-demand when you need them - with Vim 8's new package support. Save and restore sessions, enabling you to quit Vim and restart again while preserving your window layout and undo history. Use Neovim as a drop-in replacement for Vim - it supports all of the features Vim 8 offers and more, including an integrated terminal that lets you quickly perform interactive commands. And if you enjoy using tmux and Vim together, you'll love Neovim's terminal emulator, which lets you run an interactive shell in a buffer. The terminal buffers fit naturally with Vim's split windows, and you can use Normal mode commands to scroll, search, copy, and paste. On top of all that: Neovim's terminal buffers are scriptable. With Vim at the core of your development environment, you'll become a faster and more efficient developer. What You Need: You'll need a Unix-based environment and an up-to-date release of Vim (8.0 or newer). For the tips about running a terminal emulator, you'll need to install Neovim.**

The Content Analysis Guidebook

SAGE **Content analysis is one of the most important but complex research methodologies in the social sciences. In this thoroughly updated Second Edition of The Content Analysis Guidebook, author Kimberly Neuendorf provides an accessible core text for upper-level undergraduates and graduate students across the social sciences. Comprising step-by-step instructions and practical advice, this text unravels the complicated aspects of content analysis.**

Real-Time Optimization

MDPI **This book is a printed edition of the Special Issue "Real-Time Optimization" that was published in Processes**

Scientific Programming and Computer Architecture

MIT Press **A variety of programming models relevant to scientists explained, with an emphasis on how programming constructs map to parts of the computer. What makes computer programs fast or slow? To answer this question, we have to get behind the abstractions of programming languages and look at how a computer really works. This book examines and explains a variety of scientific programming models (programming models relevant to scientists) with an emphasis on how programming constructs map to different parts of the computer's architecture. Two themes emerge: program speed and program modularity. Throughout this book, the premise is to "get under the hood," and the**

discussion is tied to specific programs. The book digs into linkers, compilers, operating systems, and computer architecture to understand how the different parts of the computer interact with programs. It begins with a review of C/C++ and explanations of how libraries, linkers, and Makefiles work. Programming models covered include Pthreads, OpenMP, MPI, TCP/IP, and CUDA.The emphasis on how computers work leads the reader into computer architecture and occasionally into the operating system kernel. The operating system studied is Linux, the preferred platform for scientific computing. Linux is also open source, which allows users to peer into its inner workings. A brief appendix provides a useful table of machines used to time programs. The book's website (https://github.com/divakarvi/bk-spca) has all the programs described in the book as well as a link to the html text.

IBM High-Performance Computing Insights with IBM Power System AC922 Clustered Solution

IBM Redbooks **This IBM® Redbooks® publication documents and addresses topics to set up a complete infrastructure environment and tune the applications to use an IBM POWER9TM hardware architecture with the technical computing software stack. This publication is driven by a CORAL project solution. It explores, tests, and documents how to implement an IBM High-Performance Computing (HPC) solution on a POWER9 processor-based system by using IBM technical innovations to help solve challenging scientific, technical, and business problems. This book documents the HPC clustering solution with InfiniBand on IBM Power SystemsTM AC922 8335-GTH and 8335-GTX servers with NVIDIA Tesla V100 SXM2 graphics processing units (GPUs) with NVLink, software components, and the IBM SpectrumTM Scale parallel file system. This solution includes recommendations about the components that are used to provide a cohesive clustering environment that includes job scheduling, parallel application tools, scalable file systems, administration tools, and a high-speed interconnect. This book is divided into three parts: Part 1 focuses on the planners of the solution, Part 2 focuses on the administrators, and Part 3 focuses on the developers. This book targets technical professionals (consultants, technical support staff, IT architects, and IT specialists) who are responsible for delivering cost-effective HPC solutions that help uncover insights among clients' data so that they can act to optimize business results, product development, and scientific discoveries.**

Rational Application Developer for WebSphere Software V8 Programming Guide

IBM Redbooks **IBM® Rational® Application Developer for WebSphere® Software V8 is the full-function Eclipse 3.6 technology-based development platform for developing JavaTM Platform, Standard Edition Version 6 (Java SE 6) and Java Platform, Enterprise Edition Version 6 (Java EE 6) applications. Beyond this function, Rational Application Developer provides development tools for technologies, such as OSGi, Service Component Architecture (SCA), Web 2.0, and XML. It has a focus on applications to be deployed to IBM WebSphere Application Server and IBM WebSphere Portal. Rational Application Developer provides integrated development tools for all development roles, including web developers, Java developers, business analysts, architects, and enterprise programmers. This IBM Redbooks® publication is a programming guide that highlights the features and tooling included with Rational Application Developer V8.0.1. Many of the chapters provide working examples that demonstrate how to use the tooling to develop applications and achieve the benefits of visual and rapid application development. This publication is an update of Rational Application Developer V7.5 Programming Guide, SG24-7672.**

Master Machine Learning Algorithms

Discover How They Work and Implement Them From Scratch

Machine Learning Mastery **You must understand the algorithms to get good (and be recognized as being good) at machine learning. In this Ebook, finally cut through the math and learn exactly how machine learning algorithms work, then implement them from scratch, step-by-step.**

Better Deep Learning

Train Faster, Reduce Overfitting, and Make Better Predictions

Machine Learning Mastery **Deep learning neural networks have become easy to define and fit, but are still hard to configure. Discover exactly how to improve the performance of deep learning neural network models on your predictive modeling projects. With clear explanations, standard Python libraries, and step-by-step tutorial lessons,**

you'll discover how to better train your models, reduce overfitting, and make more accurate predictions.

Friction and Wear: From Elementary Mechanisms to Macroscopic Behavior

Frontiers Media SA **Friction and the interaction of surfaces can usually be felt at the scale of the contacting bodies. Indeed, phenomena such as the frictional resistance or the occurrence of wear can be observable with plain eye, but to characterize them and in order to make a prediction, a more detailed understanding at smaller scales is often required. These can include individual roughness peaks or single molecule interactions. In this Research Topic, we have gathered a collection of articles representing the state of the art in tribology's endeavor to bridge the gap between nano scale elementary research and the macroscopic behavior of contacting bodies. These articles showcase the breadth of questions related to the interaction of micro and macro scale and give examples of successful transfer of insights from one to the other. We are delighted to present this Research Topic to the reader with the hope that it will further inspire and stimulate research in the field.**

Exact and Heuristic Scheduling Algorithms

MDPI **This edited book presents new results in the area of the development of exact and heuristic scheduling algorithms. It contains eight articles accepted for publication for a Special Issue in the journal Algorithms. The book presents new algorithms, e.g., for flow shop, job shop, and parallel machine scheduling problems. The particular articles address subjects such as a heuristic for the routing and scheduling problem with time windows, applied to the automotive industry in Mexico, a heuristic for the blocking job shop problem with tardiness minimization based on new neighborhood structures, fast heuristics for the Euclidean traveling salesman problem or a new mathematical model for the period-aggregated resource leveling problem with variable job duration, and several others.**

Emerging Photovoltaic Technologies

"Solar photovoltaics (PV) is the fastest-growing energy technology in the world today and an important tool for mitigating climate change. Crystalline silicon PV modules are now affordable, efficient, reliable, and dominant in the global market. So why do researchers and entrepreneurs continue to pursue new PV technologies? This book explores how market forces expose opportunities for new solar technologies. The authors explain how two emerging thin-film PV technologies--metal halide perovskites and colloidal quantum dots--can benefit from rapid scalability, reduced manufacturing and installation costs, and new modes of deployment. This book is targeted at students, early-career researchers, and industry newcomers seeking to maximize their impact in the field of emerging thin-film solar photovoltaics." -- Prové de l'editor.

Learn Python in One Day and Learn It Well

Python for Beginners with Hands-On Project. the Only Book You Need to Start Coding in Python Immediately

CreateSpace **Master Python Programming with a unique Hands-On Project Have you always wanted to learn computer programming but are afraid it'll be too difficult for you? Or perhaps you know other programming languages but are interested in learning the Python language fast? This book is for you. You no longer have to waste your time and money learning Python from lengthy books, expensive online courses or complicated Python tutorials. What this book offers... Python for Beginners Complex concepts are broken down into simple steps to ensure that you can easily master the Python language even if you have never coded before. Carefully Chosen Python Examples Examples are carefully chosen to illustrate all concepts. In addition, the output for all examples are provided immediately so you do not have to wait till you have access to your computer to test the examples. Learn The Python Programming Language Fast Concepts are presented in a "to-the-point" style to cater to the busy individual. With this book, you can learn Python in just one day and start coding immediately. How is this book different... The best way to learn Python is by doing. This book includes a complete project at the end of the book that requires the application of all the concepts taught previously. Working through the project will not only give you an immense sense of achievement, it"ll also help you retain the knowledge and master the language. Are you ready to dip your toes into the exciting world of Python coding? This book is for you. Click the "Add to Cart" button to buy it now. What you'll learn: What is Python? What software you need to code and run Python programs? What are variables? What mathematical operators are there in Python? What are the common data types in Python? What are Lists and Tuples? How to format strings How to accept user inputs and display outputs How to make decisions with If statements How to control the flow of program with loops How to handle errors and exceptions What are functions and modules? How to define your own functions and modules How to work with external files .. and more... Finally, you'll be guided through a hands-on project that requires the application of all the topics covered. Click the "Add to Cart" button now to start learning Python. Learn it fast and learn it well.**

Annotated Algorithms in Python

With Applications in Physics, Biology, and Finance

Experts4solutions **This book is assembled from lectures given by the author over a period of 10 years at the School of Computing of DePaul University. The lectures cover multiple classes, including Analysis and Design of Algorithms, Scientific Computing, Monte Carlo Simulations, and Parallel Algorithms. These lectures teach the core knowledge required by any scientist interested in numerical algorithms and by students interested in computational finance.**

The Pangenome

Springer Nature **This open access book offers the first comprehensive account of the pan-genome concept and its manifold implications. The realization that the genetic repertoire of a biological species always encompasses more than the genome of each individual is one of the earliest examples of big data in biology that opened biology to the unbounded. The study of genetic variation observed within a species challenges existing views and has profound consequences for our understanding of the fundamental mechanisms underpinning bacterial biology and evolution. The underlying rationale extends well beyond the initial prokaryotic focus to all kingdoms of life and evolves into similar concepts for metagenomes, phenomes and epigenomes. The books respective chapters address a range of topics, from the serendipitous emergence of the pan-genome concept and its impacts on the fields of microbiology, vaccinology and antimicrobial resistance, to the study of microbial communities, bioinformatic applications and mathematical models that tie in with complex systems and economic theory. Given its scope, the book will appeal to a broad readership interested in population dynamics, evolutionary biology and genomics.**

Energy Efficiency in Buildings

Both New and Rehabilitated

MDPI **Buildings are one of the main causes of the emission of greenhouse gases in the world. Europe alone is responsible for more than 30% of emissions, or about 900 million tons of CO_2 per year. Heating and air conditioning are the main cause of greenhouse gas emissions in buildings. Most buildings currently in use were built with poor energy efficiency criteria or, depending on the country and the date of construction, none at all. Therefore, regardless of whether construction regulations are becoming stricter, the real challenge nowadays is the energy rehabilitation of existing buildings. It is currently a priority to reduce (or, ideally, eliminate) the waste of energy in buildings and, at the same time, supply the necessary energy through renewable sources. The first can be achieved by improving the architectural design, construction methods, and materials used, as well as the efficiency of the facilities and systems; the second can be achieved through the integration of renewable energy (wind, solar, geothermal, etc.) in buildings. In any case, regardless of whether the energy used is renewable or not, the efficiency must always be taken into account. The most profitable and clean energy is that which is not consumed.**

Advances in Microfluidics Technology for Diagnostics and Detection

MDPI **Microfluidics and lab-on-a-chip have, in recent years, come to the forefront in diagnostics and detection. At point-of-care, in the emergency room, and at the hospital bed or GP clinic, lab-on-a-chip offers the potential to rapidly detect time-critical and life-threatening diseases such as sepsis and bacterial meningitis. Furthermore, portable and user-friendly diagnostic platforms can enable disease diagnostics and detection in resource-poor settings where centralised laboratory facilities may not be available. At point-of-use, microfluidics and lab-on-chip can be applied in the field to rapidly identify plant pathogens, thus reducing the need for damaging broad spectrum pesticides while also reducing food losses. Microfluidics can also be applied to the continuous monitoring of water quality and can support policy-makers and protection agencies in protecting the environment. Perhaps most excitingly, microfluidics also offers the potential to enable entirely new diagnostic tests that cannot be implemented using conventional laboratory tools. Examples of microfluidics at the frontier of new medical diagnostic tests include early detection of cancers through circulating tumour cells (CTCs) and highly sensitive genetic tests using droplet-based digital PCR. This Special Issue on "Advances in Microfluidics Technology for Diagnostics and Detection" aims to gather outstanding research and to carry out comprehensive coverage of all aspects related to microfluidics in diagnostics and detection.**

Artificial Intelligence with Python

Packt Publishing Ltd **Build real-world Artificial Intelligence applications with Python to intelligently interact with the world around you About This Book Step into the amazing world of intelligent apps using this comprehensive guide Enter the world of Artificial Intelligence, explore it, and create your own applications Work through simple yet insightful examples that will get you up and running with Artificial Intelligence in no time Who This Book Is For This book is for**

Python developers who want to build real-world Artificial Intelligence applications. This book is friendly to Python beginners, but being familiar with Python would be useful to play around with the code. It will also be useful for experienced Python programmers who are looking to use Artificial Intelligence techniques in their existing technology stacks. What You Will Learn Realize different classification and regression techniques Understand the concept of clustering and how to use it to automatically segment data See how to build an intelligent recommender system Understand logic programming and how to use it Build automatic speech recognition systems Understand the basics of heuristic search and genetic programming Develop games using Artificial Intelligence Learn how reinforcement learning works Discover how to build intelligent applications centered on images, text, and time series data See how to use deep learning algorithms and build applications based on it In Detail Artificial Intelligence is becoming increasingly relevant in the modern world where everything is driven by technology and data. It is used extensively across many fields such as search engines, image recognition, robotics, finance, and so on. We will explore various real-world scenarios in this book and you'll learn about various algorithms that can be used to build Artificial Intelligence applications. During the course of this book, you will find out how to make informed decisions about what algorithms to use in a given context. Starting from the basics of Artificial Intelligence, you will learn how to develop various building blocks using different data mining techniques. You will see how to implement different algorithms to get the best possible results, and will understand how to apply them to real-world scenarios. If you want to add an intelligence layer to any application that's based on images, text, stock market, or some other form of data, this exciting book on Artificial Intelligence will definitely be your guide! Style and approach This highly practical book will show you how to implement Artificial Intelligence. The book provides multiple examples enabling you to create smart applications to meet the needs of your organization. In every chapter, we explain an algorithm, implement it, and then build a smart application.

Data Science and Big Data Analytics

Discovering, Analyzing, Visualizing and Presenting Data

John Wiley & Sons **Data Science and Big Data Analytics is about harnessing the power of data for new insights. The book covers the breadth of activities and methods and tools that Data Scientists use. The content focuses on concepts, principles and practical applications that are applicable to any industry and technology environment, and the learning is supported and explained with examples that you can replicate using open-source software. This book will help you: Become a contributor on a data science team Deploy a structured lifecycle approach to data analytics problems Apply appropriate analytic techniques and tools to analyzing big data Learn how to tell a compelling story with data to drive business action Prepare for EMC Proven Professional Data Science Certification Corresponding data sets are available from the book's page at Wiley which you can find on the Wiley site by searching for the ISBN 9781118876138. Get started discovering, analyzing, visualizing, and presenting data in a meaningful way today!**

Advanced Smart Grid Functionalities Based on PowerFactory

Springer **This book consolidates some of the most promising advanced smart grid functionalities and provides a comprehensive set of guidelines for their implementation/evaluation using DIgSILENT Power Factory. It includes specific aspects of modeling, simulation and analysis, for example wide-area monitoring, visualization and control, dynamic capability rating, real-time load measurement and management, interfaces and co-simulation for modeling and simulation of hybrid systems. It also presents key advanced features of modeling and automation of calculations using PowerFactory, such as the use of domain-specific (DSL) and DIgSILENT Programming (DPL) languages, and utilizes a variety of methodologies including theoretical explanations, practical examples and guidelines. Providing a concise compilation of significant outcomes by experienced users and developers of this program, it is a valuable resource for postgraduate students and engineers working in power-system operation and planning.**

The Fortran 2003 Handbook

The Complete Syntax, Features and Procedures

Springer Science & Business Media **The Fortran 2003 Handbook is a definitive and comprehensive guide to Fortran 2003 and its use. Fortran 2003, the latest standard version of Fortran, has many excellent features that assist the programmer in writing efficient, portable and maintainable programs. This all-inclusive volume offers a reader-friendly, easy-to-follow and informal description of Fortran 2003, and has been developed to provide not only a readable explanation of features, but also some rationale for the inclusion of features and their use. This highly versatile handbook is intended for anyone who wants a comprehensive survey of Fortran 2003.**

STRUCTURED COMPUTER ORGANIZATION

The Palgrave Handbook of Humanitarian Logistics and Supply Chain Management

Springer **Focusing on the specific challenges of research design and exploring the opportunities of conducting research in humanitarian logistics and supply chain management, this handbook is a significant contribution to future research. Chapters include extensive descriptions of methods used, highlighting their advantages and disadvantages, and the challenges in scoping, sampling, collecting and analysing data, as well as ensuring the quality of studies. Covering a wide variety of topics including risk and resilience and the impact of humanitarian logistics on capacity building, sustainability and the local economy, it also explores the need for scalability and co-ordination in the humanitarian network. Contributors provide important insight on future directions and offer crucial guidance for researchers conducting projects within the field.**

Practical Vim

Edit Text at the Speed of Thought

Pragmatic Bookshelf **Vim is a fast and efficient text editor that will make you a faster and more efficient developer. It's available on almost every OS, and if you master the techniques in this book, you'll never need another text editor. In more than 120 Vim tips, you'll quickly learn the editor's core functionality and tackle your trickiest editing and writing tasks. This beloved bestseller has been revised and updated to Vim 7.4 and includes three brand-new tips and five fully revised tips. A highly configurable, cross-platform text editor, Vim is a serious tool for programmers, web developers, and sysadmins who want to raise their game. No other text editor comes close to Vim for speed and efficiency; it runs on almost every system imaginable and supports most coding and markup languages. Learn how to edit text the "Vim way": complete a series of repetitive changes with The Dot Formula using one keystroke to strike the target, followed by one keystroke to execute the change. Automate complex tasks by recording your keystrokes as a macro. Discover the "very magic" switch that makes Vim's regular expression syntax more like Perl's. Build complex patterns by iterating on your search history. Search inside multiple files, then run Vim's substitute command on the result set for a project-wide search and replace. All without installing a single plugin! Three new tips explain how to run multiple ex commands as a batch, autocomplete sequences of words, and operate on a complete search match. Practical Vim, Second Edition will show you new ways to work with Vim 7.4 more efficiently, whether you're a beginner or an intermediate Vim user. All this, without having to touch the mouse. What You Need: Vim version 7.4**