

## Code Junior Impara Il Python Costruendo Un Mondo In 3d

Beginner's Guide to ZBrush is an essential resource for newcomers to this powerful software, packed with detailed instructions and tutorials.

Doing Math with Python shows you how to use Python to delve into high school–level math topics like statistics, geometry, probability, and calculus. You'll start with simple projects, like a factoring program and a quadratic-equation solver, and then create more complex projects once you've gotten the hang of things. Along the way, you'll discover new ways to explore math and gain valuable programming skills that you'll use throughout your study of math and computer science. Learn how to: –Describe your data with statistics, and visualize it with line graphs, bar charts, and scatter plots –Explore set theory and probability with programs for coin flips, dicing, and other games of chance –Solve algebra problems using Python's symbolic math functions –Draw geometric shapes and explore fractals like the Barnsley fern, the Sierpinski triangle, and the Mandelbrot set –Write programs to find derivatives and integrate functions Creative coding challenges and applied examples help you see how you can put your new math and coding skills into practice. You'll write an inequality solver, plot gravity's effect on how far a bullet will travel, shuffle a deck of cards, estimate the area of a circle by throwing 100,000 "darts" at a board, explore the relationship between the Fibonacci sequence and the golden ratio, and more. Whether you're interested in math but have yet to dip into programming or you're a teacher looking to bring programming into the classroom, you'll find that Python makes programming easy and practical. Let Python handle the grunt work while you focus on the math. Uses Python 3

How lessons from kindergarten can help everyone develop the creative thinking skills needed to thrive in today's society. In kindergartens these days, children spend more time with math worksheets and phonics flashcards than building blocks and finger paint. Kindergarten is becoming more like the rest of school. In Lifelong Kindergarten, learning expert Mitchel Resnick argues for exactly the opposite: the rest of school (even the rest of life) should be more like kindergarten. To thrive in today's fast-changing world, people of all ages must learn to think and act creatively—and the best way to do that is by focusing more on imagining, creating, playing, sharing, and reflecting, just as children do in traditional kindergartens. Drawing on experiences from more than thirty years at MIT's Media Lab, Resnick discusses new technologies and strategies for engaging young people in creative learning experiences. He tells stories of how children are programming their own games, stories, and inventions (for example, a diary security system, created by a twelve-year-old girl), and collaborating through remixing, crowdsourcing, and large-scale group projects (such as a Halloween-themed game called Night at Dreary Castle, produced by more than twenty kids scattered around the world). By providing young people with opportunities to work on projects, based on their passions, in collaboration with peers, in a playful spirit, we can help them prepare for a world where creative thinking is more important than ever before.

Best-selling author, Walter Savitch, uses a conversational style to teach programmers problem solving and programming techniques with Java. Readers are introduced to object-oriented programming and important computer science concepts such as testing and debugging techniques, program style, inheritance, and exception handling. It includes thorough coverage of the Swing libraries and event driven programming. The Java coverage is a concise, accessible introduction that covers key language features. Thorough early coverage of objects is included, with an emphasis on applications over applets. The author includes a highly flexible format that allows readers to adapt coverage of topics to their preferred order. Although the book does cover such more advanced topics as inheritance, exception handling, and the Swing libraries, it starts from the beginning, and it teaches traditional, more basic techniques, such as algorithm design. The volume provides concise coverage of computers and Java objects, primitive types, strings, and interactive I/O, flow of control, defining classes and methods, arrays, inheritance, exception handling, streams and file I/O, recursion, window interfaces using swing objects, and applets and HTML. For Programmers.

Learn to use one of the most powerful text processing and manipulation tools available Regular expression experts have long been armed with an incredibly powerful tool, one that can be used to perform all sorts of sophisticated text processing and manipulation in just about every language and on every platform. That's the good news. The bad news is that for too long, regular expressions have been the exclusive property of only the most tech savvy. Until now. Ben Forta's Learning Regular Expressions teaches you the regular expressions that you really need to know, starting with simple text matches and working up to more complex topics, including the use of backreferences, conditional evaluation, and look-ahead processing. You'll learn what you can use, and you'll learn it methodically, systematically, and simply. Regular expressions are nowhere near as complex as they appear to be at first glance. All it takes is a clear understanding of the problem being solved and how to leverage regular expressions to solve them. Read and understand regular expressions Use literal text and metacharacters to build powerful search patterns Take advantage of advanced regular expression features, including lookahead and backreferences Perform powerful search-and-replace operations in all major professional editing tools Add sophisticated form and text processing to web applications Search for files using command-line tools like grep and egrep Use regular expressions in programming languages like JavaScript, Java, PHP, Python, Microsoft .NET, and C#, as well as in DBMSs including MySQL and Oracle Work with phone numbers, postal codes, social security numbers, IP addresses, URLs, email addresses, and credit card numbers Contents at a Glance 1 Introducing Regular Expressions 2 Matching Single Characters 3 Matching Sets of Characters 4 Using Metacharacters 5 Repeating Matches 6 Position Matching 7 Using Subexpressions 8 Using Backreferences 9 Looking Ahead and Behind 10 Embedding Conditions 11 Regular Expression Solutions to Common Problems Appendix A Regular Expressions in Popular Applications and Languages

This book is Part I of the fourth edition of Robert Sedgwick and Kevin Wayne's Algorithms , the leading textbook on algorithms today, widely used in colleges and universities worldwide. Part I contains Chapters 1 through 3 of the book. The fourth edition of Algorithms surveys the most important computer algorithms currently in use and provides a full treatment of data structures and algorithms for sorting, searching, graph processing, and string processing -- including fifty algorithms every programmer should know. In this edition, new Java implementations are written in an accessible modular programming style, where all of the code is exposed to the reader and ready to use. The algorithms in this book represent a body of knowledge developed over the last 50 years that has become indispensable, not just for professional programmers and computer science students but for any student with interests in science, mathematics, and engineering, not to mention students who use computation in the liberal arts. The companion web site, [algs4.cs.princeton.edu](http://algs4.cs.princeton.edu) contains An online synopsis Full Java implementations Test data Exercises

and answers Dynamic visualizations Lecture slides Programming assignments with checklists Links to related material The MOOC related to this book is accessible via the "Online Course" link at [algs4.cs.princeton.edu](https://algs4.cs.princeton.edu). The course offers more than 100 video lecture segments that are integrated with the text, extensive online assessments, and the large-scale discussion forums that have proven so valuable. Offered each fall and spring, this course regularly attracts tens of thousands of registrants. Robert Sedgwick and Kevin Wayne are developing a modern approach to disseminating knowledge that fully embraces technology, enabling people all around the world to discover new ways of learning and teaching. By integrating their textbook, online content, and MOOC, all at the state of the art, they have built a unique resource that greatly expands the breadth and depth of the educational experience.

Media Activism in the Digital Age captures an exciting moment in the evolution of media activism studies and offers an invaluable guide to this vibrant and evolving field of research. Victor Pickard and Guobin Yang have assembled essays by leading scholars and activists to provide case studies of feminist, technological, and political interventions during different historical periods and at local, national, and global levels. Looking at the underlying theories, histories, politics, ideologies, tactics, strategies, and aesthetics, the book takes an expansive view of media activism. It explores how varieties of activism are mediated through communication technologies, how activists deploy strategies for changing the structures of media systems, and how governments and corporations seek to police media activism. From memes to zines, hacktivism to artivism, this volume considers activist practices involving both older kinds of media and newer digital, social, and network-based forms. Media Activism in the Digital Age provides a useful cross-section of this growing field for both students and researchers.

This book is a tutorial for the Python 3 programming language designed for someone with no programming experience. Starting from no programming knowledge, the book teaches how to create programs with examples, explanations and exercises.

The theme of the conference this year was Critical CALL, drawing inspiration from the work carried out in the broader field of Critical Applied Linguistics. The term 'critical' has many possible interpretations, and as Pennycook (2001) outlines, has many concerns. It was from these that we decided on the conference theme, in particular the notion that we should question the assumptions that lie at the basis of our praxis, ideas that have become 'naturalized' and are not called into question. Over 200 presentations were delivered in 68 different sessions, both in English and Italian, on topics related specifically to the theme and also more general CALL topics. 94 of these were submitted as extended papers and appear in this volume of proceedings.

New edition of the bestselling guide to mastering Python Networking, updated to Python 3 and including the latest on network data analysis, Cloud Networking, Ansible 2.8, and new libraries Key Features Explore the power of Python libraries to tackle difficult network problems efficiently and effectively, including pyATS, Nornir, and Ansible 2.8 Use Python and Ansible for DevOps, network device automation, DevOps, and software-defined networking Become an expert in implementing advanced network-related tasks with Python 3 Book Description Networks in your infrastructure set the foundation for how your application can be deployed, maintained, and serviced. Python is the ideal language for network engineers to explore tools that were previously available to systems engineers and application developers. In Mastering Python Networking, Third edition, you'll embark on a Python-based journey to transition from traditional network engineers to network developers ready for the next-generation of networks. This new edition is completely revised and updated to work with Python 3. In addition to new chapters on network data analysis with ELK stack (Elasticsearch, Logstash, Kibana, and Beats) and Azure Cloud Networking, it includes updates on using newer libraries such as pyATS and Nornir, as well as Ansible 2.8. Each chapter is updated with the latest libraries with working examples to ensure compatibility and understanding of the concepts. Starting with a basic overview of Python, the book teaches you how it can interact with both legacy and API-enabled network devices. You will learn to leverage high-level Python packages and frameworks to perform network automation tasks, monitoring, management, and enhanced network security followed by Azure and AWS Cloud networking. Finally, you will use Jenkins for continuous integration as well as testing tools to verify your network. What you will learn Use Python libraries to interact with your network Integrate Ansible 2.8 using Python to control Cisco, Juniper, and Arista network devices Leverage existing Flask web frameworks to construct high-level APIs Learn how to build virtual networks in the AWS & Azure Cloud Learn how to use Elastic Stack for network data analysis Understand how Jenkins can be used to automatically deploy changes in your network Use PyTest and Unittest for Test-Driven Network Development in networking engineering with Python Who this book is for Mastering Python Networking, Third edition is for network engineers, developers, and SREs who want to use Python for network automation, programmability, and data analysis. Basic familiarity with Python programming and networking-related concepts such as Transmission Control Protocol/Internet Protocol (TCP/IP) will be useful.

"The Apologia and Florida of Apuleius of Madaura" by Apuleius (translated by Harold Edgeworth Butler). Published by Good Press. Good Press publishes a wide range of titles that encompasses every genre. From well-known classics & literary fiction and non-fiction to forgotten?or yet undiscovered gems?of world literature, we issue the books that need to be read. Each Good Press edition has been meticulously edited and formatted to boost readability for all e-readers and devices. Our goal is to produce eBooks that are user-friendly and accessible to everyone in a high-quality digital format.

This revised and expanded new edition elucidates the elegance and simplicity of the fundamental theory underlying formal languages and compilation. Retaining the reader-friendly style of the 1st edition, this versatile textbook describes the essential principles and methods used for defining the syntax of artificial languages, and for designing efficient parsing algorithms and syntax-directed translators with semantic attributes. Features: presents a novel conceptual approach to parsing algorithms that applies to extended BNF grammars, together with a parallel parsing algorithm (NEW); supplies supplementary teaching tools at an associated website; systematically discusses ambiguous forms, allowing readers to avoid pitfalls; describes all algorithms in pseudocode; makes extensive usage of theoretical models of automata, transducers and formal grammars; includes concise coverage of algorithms for processing regular expressions and finite automata; introduces static program analysis based on flow equations.

This work has been selected by scholars as being culturally important, and is part of the knowledge base of civilization as we know it. This work was reproduced from the original artifact, and remains as true to the original work as possible. Therefore, you will see the original copyright references, library stamps (as most of these works have been housed in our most important libraries around the world), and other notations in the work. This work is in the public domain in the United States of America, and possibly other nations. Within the United States, you may freely copy and distribute this work, as no entity (individual or corporate) has a copyright on the body of the work. As a reproduction of a historical artifact, this work may contain missing or blurred pages, poor pictures, errant marks, etc. Scholars believe, and we concur, that this work is important enough to be preserved, reproduced, and made generally available to the public. We appreciate your support of the preservation process, and thank you for being an important part of keeping this knowledge alive and relevant.

Presents a guide for beginners on the fundamentals of computer programming using the Python language.

Basic principles of image processing and programming explained without college-level mathematics. This book explores image processing from several perspectives: the creative, the theoretical (mainly mathematical), and the programmatical. It explains the basic principles of image processing, drawing on key concepts and techniques from mathematics, psychology of perception, computer science, and art, and introduces computer programming as a way to get more control over image processing operations. It does so without requiring college-level mathematics or prior programming experience. The content is supported by PixelMath, a freely available software program that helps the reader understand images as both visual and mathematical objects. The first part of the book covers such topics as digital image representation, sampling, brightness and contrast, color models, geometric transformations, synthesizing images, stereograms, photomosaics, and fractals. The second part of the book introduces computer programming using an open-source version of the easy-to-learn Python language. It covers the basics of image analysis and pattern recognition, including edge detection, convolution, thresholding, contour representation, and K-nearest-neighbor classification. A chapter on computational photography explores such subjects as high-dynamic-range imaging, autofocus, and methods for automatically inpainting to fill gaps or remove unwanted objects in a scene. Applications described include the design and implementation of an image-based game. The PixelMath software provides a "transparent" view of digital images by allowing the user to view the RGB values of pixels by zooming in on an image. PixelMath provides three interfaces: the pixel calculator; the formula page, an advanced extension of the calculator; and the Python window.

Guide to meeting the needs of gifted school-aged girls and helping them to thrive in the educational environment.

It's easier to learn how to program a computer than it has ever been before. Now everyone can learn to write programs for themselves - no previous experience is necessary. Chris Pine takes a thorough, but lighthearted approach that teaches you the fundamentals of computer programming, with a minimum of fuss or bother. Whether you are interested in a new hobby or a new career, this book is your doorway into the world of programming. Computers are everywhere, and being able to program them is more important than it has ever been. But since most books on programming are written for other programmers, it can be hard to break in. At least it used to be. Chris Pine will teach you how to program. You'll learn to use your computer better, to get it to do what you want it to do. Starting with small, simple one-line programs to calculate your age in seconds, you'll see how to write interactive programs, to use APIs to fetch live data from the internet, to rename your photos from your digital camera, and more. You'll learn the same technology used to drive modern dynamic websites and large, professional applications. Whether you are looking for a fun new hobby or are interested in entering the tech world as a professional, this book gives you a solid foundation in programming. Chris teaches the basics, but also shows you how to think like a programmer. You'll learn through tons of examples, and through programming challenges throughout the book. When you finish, you'll know how and where to learn more - you'll be on your way. What You Need: All you need to learn how to program is a computer (Windows, macOS, or Linux) and an internet connection. Chris Pine will lead you through setting set up with the software you will need to start writing programs of your own.

Imagine mathematics, imagine with the help of mathematics, imagine new worlds, new geometries, new forms. Imagine building mathematical models that make it possible to manage our world better, imagine solving great problems, imagine new problems never before thought of, imagine combining music, art, poetry, literature, architecture, theatre and cinema with mathematics. Imagine the unpredictable and sometimes counterintuitive applications of mathematics in all areas of human endeavour. This seventh volume starts with a homage to the Italian artist Mimmo Paladino who created exclusively for the Venice Conference 2019 ten original and unique works of art paper dedicated to the themes of the meeting. A large section is dedicated to the most recent Fields Medals including a Homage to Maryam Mirzakhani including a presentation of the exhibition on soap bubbles in art and science that took place in 2019. A section is dedicated to cinema and theatre including the performances by Claire Bardainne & Adrien Mondot. A part of the conference focused on the community of mathematicians, their role in literature and even in politics with the extraordinary example of Antanas Mockus Major of Bogotá. Mathematics in the constructions of bridges, in particular in Italy in the Sixties was presented by Tullia Iori. A very particular contribution on Origami by a mathematician, Marco Abate and an artist, Alessandro Beber. And many other topics. As usual the topics are treated in a way that is rigorous but captivating, detailed and full of evocations. This is an all-embracing look at the world of mathematics and culture. The world, life, culture, everything has changed in a few weeks with the Coronavirus. Culture, science are the main ways to safeguard people's physical and social life. Trust in humanity's creativity and ability. The motto today in Italy is Everything will be fine. This work is addressed to all those who have an interest in Mathematics.

Impara il Python, costruendo un mondo tridimensionale! Dedicato ai ragazzi delle scuole elementari e medie, il libro è associato al sito <http://www.codejr.it> e fornisce gli strumenti per imparare le basi della programmazione Python. Il libro contiene semplici esercizi da eseguire passo passo e sperimentare nel mondo 3d di Code Junior. Gli esercizi sono tutti finalizzati alla costruzione di un mondo tridimensionale "a blocchi", producono risultati immediatamente visibili nel mondo tridimensionale e sono attività giocose e divertenti.

Foreword by Oliver Schabenberger, PhD Executive Vice President, Chief Operating Officer and Chief Technology Officer SAS Dive into deep learning! Machine learning and deep learning are ubiquitous in our homes and workplaces-from machine translation to image recognition and predictive analytics to autonomous driving. Deep learning holds the promise of improving many everyday tasks in a variety of disciplines. Much deep learning literature explains the mechanics of deep learning with the goal of implementing cognitive applications fueled by Big Data. This book is different. Written by an expert in high-performance analytics, Deep Learning for Numerical Applications with SAS® introduces a new field: Deep Learning for Numerical Applications (DL4NA). Contrary to deep learning, the primary goal of DL4NA is not to learn from data but to dramatically improve the performance of numerical applications by training deep neural networks. Deep Learning for Numerical Applications with SAS® presents deep learning

concepts in SAS along with step-by-step techniques that allow you to easily reproduce the examples on your high-performance analytics systems. It also discusses the latest hardware innovations that can power your SAS programs: from many-core CPUs to GPUs to FPGAs to ASICs. This book assumes the reader has no prior knowledge of high-performance computing, machine learning, or deep learning. It is intended for SAS developers who want to develop and run the fastest analytics. In addition to discovering the latest trends in hybrid architectures with GPUs and FPGAs, readers will learn how to Use deep learning in SAS Speed up their analytics using deep learning Easily write highly parallel programs using the many task computing paradigms For sample material and supporting resources, please see the author's page. This book is part of the SAS Press program.

DevNet Associate DEVASC 200-901 Official Certification Guide is Cisco's official, comprehensive self-study resource for Cisco's DEVASC 200-901 exam: your pathway to the DevNet Associate Certification demonstrating your knowledge of application development and automation on Cisco platforms. Written by Cisco experts based on Cisco's own internal training, it clearly explains the value of each technique, presents realistic use cases, introduces solution components, illuminates their inner workings, and shows how to execute on what you've learned in practice. Designed for all Cisco DevNet Associate candidates, it covers every DEVASC 200-901 objective concisely and logically, with extensive teaching features designed to promote retention and understanding. You'll find: Pre-chapter quizzes to assess knowledge upfront and focus your study more efficiently Foundation topics sections that explain concepts and configurations, and link theory to practice Key topics sections calling attention to every figure, table, and list you must know Exam Preparation sections with additional chapter review features Final preparation chapter providing tools and a complete final study plan A customizable practice test library This guide offers comprehensive, up-to-date coverage of all DEVASC 200-901 topics related to: Software development and design Understanding and using APIs Cisco platforms and development Application deployment and security Infrastructure and automation Network fundamentals

Despite the growing interest in Apuleius' Apologia or Pro se de magia, a speech he delivered in AD 158/159 to defend himself against the charge of being a magus, the only comprehensive study on this speech and magic to date is that by Adam Abt (1908). The aim of this volume is to shed new light on the extent to which Apuleius' speech reveals his own knowledge of magic, and on the implications of the dangerous allegations brought against Apuleius. By analysing the Apologia sequentially, the author does not only reassess Abt's analysis but proposes a new reconstruction of the prosecution's case, arguing that it is heavily distorted by Apuleius. Since ancient magic is the main topic of this speech, an extensive discussion of the topic is provided, offering a new semantic taxonomy of magus and its cognates. Finally, this volume also explores Apuleius' forensic techniques and the Platonic ideology underpinning his speech. It is proposed that a Platonising reasoning – distinguishing between higher and lower concepts – lies at the core of Apuleius' rhetorical strategy, and that Apuleius aims to charm the judge, the audience and, ultimately, his readers with the irresistible power of his arguments.

Fifteen-year-old Samuel Scott died while building the Titanic. As the ship sails to her doom, his ghost moves restlessly alongside the passengers and crew: Frederick Fleet: the young look-out who spotted the iceberg and who survived in a life-boat with (the unsinkable) Molly Brown; Howard Hartley Wallace: the heroic band-leader who played ragtime music as the freezing waters lapped at his feet; Harold Bride: the junior radio operator whose messages echoed on, long after the ship had disappeared to its icy grave ...

The Hardware Hacking Handbook takes you deep inside embedded devices to show how different kinds of attacks work, then guides you through each hack on real hardware. Embedded devices are chip-size microcomputers small enough to be included in the structure of the object they control, and they're everywhere—in phones, cars, credit cards, laptops, medical equipment, even critical infrastructure. This means understanding their security is critical. The Hardware Hacking Handbook takes you deep inside different types of embedded systems, revealing the designs, components, security limits, and reverse-engineering challenges you need to know for executing effective hardware attacks. Written with wit and infused with hands-on lab experiments, this handbook puts you in the role of an attacker interested in breaking security to do good. Starting with a crash course on the architecture of embedded devices, threat modeling, and attack trees, you'll go on to explore hardware interfaces, ports and communication protocols, electrical signaling, tips for analyzing firmware images, and more. Along the way, you'll use a home testing lab to perform fault-injection, side-channel (SCA), and simple and differential power analysis (SPA/DPA) attacks on a variety of real devices, such as a crypto wallet. The authors also share insights into real-life attacks on embedded systems, including Sony's PlayStation 3, the Xbox 360, and Philips Hue lights, and provide an appendix of the equipment needed for your hardware hacking lab – like a multimeter and an oscilloscope – with options for every type of budget. You'll learn:

- How to model security threats, using attacker profiles, assets, objectives, and countermeasures
- Electrical basics that will help you understand communication interfaces, signaling, and measurement
- How to identify injection points for executing clock, voltage, electromagnetic, laser, and body-biasing fault attacks, as well as practical injection tips
- How to use timing and power analysis attacks to extract passwords and cryptographic keys
- Techniques for leveling up both simple and differential power analysis, from practical measurement tips to filtering, processing, and visualization

Whether you're an industry engineer tasked with understanding these attacks, a student starting out in the field, or an electronics hobbyist curious about replicating existing work, The Hardware Hacking Handbook is an indispensable resource – one you'll always want to have onhand.

Code Junior Impara il Python Costruendo un Mondo In 3D!

While Excel remains ubiquitous in the business world, recent Microsoft feedback forums are full of requests to include Python as an Excel scripting language. In fact, it's the top feature requested. What makes this combination so compelling? In this hands-on guide, Felix Zumstein--creator of xlwings, a popular open source package for automating Excel with Python--shows experienced Excel users how to integrate these two worlds efficiently. Excel has added quite a few new capabilities over the past couple of years, but its automation language, VBA, stopped evolving a long time ago. Many Excel power users have already adopted Python for daily automation tasks. This guide gets you started. Use Python without extensive programming knowledge Get started with modern tools, including Jupyter notebooks and Visual Studio code Use pandas to acquire, clean, and analyze data and replace typical Excel calculations Automate tedious tasks like consolidation of Excel workbooks and production of Excel reports Use xlwings to build interactive Excel tools that use Python as a calculation engine Connect Excel to databases and CSV files and fetch data from the internet using Python code Use Python as a single tool to replace VBA, Power Query, and Power Pivot

How do the experts solve difficult problems in software development? In this unique and insightful book, leading computer scientists offer case studies that reveal how they found unusual, carefully designed solutions to high-profile projects. You will be able to look over the shoulder of major coding and design experts to see problems through their eyes. This is not simply another design patterns book, or another software engineering treatise on the right and wrong way to do things. The authors think aloud as they work through their project's architecture, the tradeoffs made in its construction, and when it was important to break rules. This book contains 33 chapters contributed by Brian Kernighan, Karl Fogel, Jon Bentley, Tim Bray, Eliotte Rusty Harold, Michael Feathers, Alberto Savoia, Charles Petzold, Douglas Crockford, Henry S. Warren, Jr., Ashish Gulhati, Lincoln Stein, Jim Kent, Jack Dongarra and Piotr Luszczek, Adam Kolawa, Greg Kroah-Hartman, Diomidis Spinellis, Andrew Kuchling, Travis E. Oliphant, Ronald Mak, Rogerio Atem de Carvalho and Rafael Monnerat, Bryan Cantrill, Jeff Dean and Sanjay Ghemawat, Simon Peyton Jones, Kent Dybvig, William Otte and Douglas C. Schmidt, Andrew Patzer, Andreas Zeller, Yukihiro Matsumoto, Arun Mehta, TV Raman, Laura Wingerd and Christopher Seiwald, and Brian Hayes. Beautiful Code is an opportunity for master coders to tell their story. All author

royalties will be donated to Amnesty International.

This edited volume lays the groundwork for Social Data Science, addressing epistemological issues, methods, technologies, software and applications of data science in the social sciences. It presents data science techniques for the collection, analysis and use of both online and offline new (big) data in social research and related applications. Among others, the individual contributions cover topics like social media, learning analytics, clustering, statistical literacy, recurrence analysis and network analysis. Data science is a multidisciplinary approach based mainly on the methods of statistics and computer science, and its aim is to develop appropriate methodologies for forecasting and decision-making in response to an increasingly complex reality often characterized by large amounts of data (big data) of various types (numeric, ordinal and nominal variables, symbolic data, texts, images, data streams, multi-way data, social networks etc.) and from diverse sources. This book presents selected papers from the international conference on Data Science & Social Research, held in Naples, Italy in February 2016, and will appeal to researchers in the social sciences working in academia as well as in statistical institutes and offices. Introduces regular expressions and how they are used, discussing topics including metacharacters, nomenclature, matching and modifying text, expression processing, benchmarking, optimizations, and loops.

This book constitutes the proceedings of the 3rd International Conference on E-Learning, E-Education, and Online Training, eLEOT 2016, held in Dublin, Ireland, August 31 – September 2, 2016. The 25 revised full papers presented were carefully reviewed and selected from 35 submissions. They focus on topics as augmented reality learning, blended learning, learning analytics, mobile learning, virtual learning environments.

What should students learn to best prepare for the twenty-first century? In this book, the Center for Curriculum Redesign (CCR) describes a framework built to address this question, so that curriculum is redesigned for versatility and adaptability, to thrive in our volatile present and uncertain future. The framework focuses on knowledge (what to know and understand), skills (how to use that knowledge), character (how to behave and engage in the world), and meta-learning (how to reflect on and adapt by continuing to learn and grow). This book is essential for teachers, department heads, heads of schools, administrators, policymakers, standard setters, curriculum and assessment developers, and other thought leaders and influencers, who seek to develop a thorough understanding of the needs and challenges we all face, and to help devise innovative solutions.

Leverage Python and Raspberry Pi to create complex IoT applications capable of creating and detecting movement and measuring distance, light, and a host of other environmental conditions Key Features Learn the fundamentals of electronics and how to integrate them with a Raspberry Pi Understand how to build RESTful APIs, WebSocket APIs, and MQTT-based applications Explore alternative approaches to structuring IoT applications with Python Book Description The age of connected devices is here, be it fitness bands or smart homes. It's now more important than ever to understand how hardware components interact with the internet to collect and analyze user data. The Internet of Things (IoT), combined with the popular open source language Python, can be used to build powerful and intelligent IoT systems with intuitive interfaces. This book consists of three parts, with the first focusing on the "Internet" component of IoT. You'll get to grips with end-to-end IoT app development to control an LED over the internet, before learning how to build RESTful APIs, WebSocket APIs, and MQTT services in Python. The second part delves into the fundamentals behind electronics and GPIO interfacing. As you progress to the last part, you'll focus on the "Things" aspect of IoT, where you will learn how to connect and control a range of electronic sensors and actuators using Python. You'll also explore a variety of topics, such as motor control, ultrasonic sensors, and temperature measurement. Finally, you'll get up to speed with advanced IoT programming techniques in Python, integrate with IoT visualization and automation platforms, and build a comprehensive IoT project. By the end of this book, you'll be well-versed with IoT development and have the knowledge you need to build sophisticated IoT systems using Python. What you will learn Understand electronic interfacing with Raspberry Pi from scratch Gain knowledge of building sensor and actuator electronic circuits Structure your code in Python using Async IO, pub/sub models, and more Automate real-world IoT projects using sensor and actuator integration Integrate electronics with ThingSpeak and IFTTT to enable automation Build and use RESTful APIs, WebSockets, and MQTT with sensors and actuators Set up a Raspberry Pi and Python development environment for IoT projects Who this book is for This IoT Python book is for application developers, IoT professionals, or anyone interested in building IoT applications using the Python programming language. It will also be particularly helpful for mid to senior-level software engineers who are experienced in desktop, web, and mobile development, but have little to no experience of electronics, physical computing, and IoT.

Over the past decade, businesses have faced relentless change on multiple dimensions, and the list of the world's largest companies has changed enormously. The keys to success are likely to be just as different for the new decade. Winning the '20s analyzes the new competitive environment that businesses face and outlines what will it take to win in the 2020s. To stay ahead of the trends that are reshaping business, leaders need to rethink existing assumptions and retool their companies. Both traditional incumbents and younger digital giants will face very different but equally critical challenges in the 2020s—and would do well to learn from each other's strengths. This book discusses the new dimensions of competition that will affect corporate strategy in the next decade and how leaders can reinvent their organizations to be better suited for the new environment. The companies that succeed in the 2020s will look very different than they do today—they will have evolved their businesses to harness new technologies and reshaped their external relationships, organizations, and approaches accordingly. Winning the '20s will help business professionals as well as academics and students with an interest in strategy and leadership answer this critical question for the start of this decade: How should you prepare your company to avoid being left behind and emerge as a winner in a rapidly evolving business landscape?

C++ was written to help professional C# developers learn modern C++ programming. The aim of this book is to leverage your existing C# knowledge in order to expand your skills. Whether you need to use C++ in an upcoming project, or simply want to learn a new language (or reacquaint yourself with it), this book will help you learn all of the fundamental pieces of C++ so you can begin writing your own C++ programs. This updated and expanded second edition of Book provides a user-friendly introduction to the subject, Taking a clear structural framework, it guides the reader through the subject's core elements. A flowing writing style combines with the use of illustrations and diagrams throughout the text to ensure the reader understands even the most complex of concepts. This succinct and enlightening overview is a required reading for all those interested in the subject. We hope you find this book useful in shaping your future career & Business.

Can cats code? These cats sure can! Find out all about loops and conditionals, presented with playful rhyming verse and goofy illustrations. Readers will learn how loops and

conditionals can save coders time, with lots of examples from everyday life. If loops and conditionals are throwing you for a loop, then this is just the book for you! Author Brian P. Cleary, illustrator Martin Goneau, and the enthusiastic CATegorical cats offer a fun and accessible introduction to key coding concepts.

Psychopathy is a very important concept for those working in the field of criminal justice - investigators, prosecutors, and those who have to evaluate, manage and treat offenders. In *Psychopathy: Theory, Research and Implications for Society*, detailed, empirically based contributions by the world's leading researchers describe the relevance of the construct to practical and policy issues, examining its relevance to such topics as treatment, risk management and recidivism. The use of the concept in a range of populations is discussed, including juveniles, children, and the mentally disordered, as well as across cultures. The major strength of the volume is that the validity of the psychopathy construct is enhanced by the extensive empirical support: contributors explore topics including the genetic, biological, affective, interpersonal and information processing models that underpin the disorder. Audience: All those dealing with offenders - psychologists, psychiatrists, lawyers, judges, prison administrators and those who formulate policy in the criminal justice system.

Empower tomorrow's tech innovators Our students are avid users and consumers of technology. Isn't it time that they see themselves as the next technological innovators, too? *Computational Thinking and Coding for Every Student* is the beginner's guide for K-12 educators who want to learn to integrate the basics of computer science into their curriculum. Readers will find Strategies and activities for teaching computational thinking and coding inside and outside of school, at any grade level, across disciplines Instruction-ready lessons for every grade A discussion guide and companion website with videos, activities, and other resources

OGT Exit Level Reading Workbook prepares students for the reading portion of the Ohio Graduation Test. Samples from similar tests provide plenty of practice and students learn to take multiple choice tests on their comprehension of what they read. Students learn to evaluate their own short answers to targeted questions, and learn from other students' responses to similar questions. This book is suitable for students in all states who need to take a reading exam for graduation or course completion.

What others in the trenches say about *The Pragmatic Programmer*... "The cool thing about this book is that it's great for keeping the programming process fresh. The book helps you to continue to grow and clearly comes from people who have been there." —Kent Beck, author of *Extreme Programming Explained: Embrace Change* "I found this book to be a great mix of solid advice and wonderful analogies!" —Martin Fowler, author of *Refactoring* and *UML Distilled* "I would buy a copy, read it twice, then tell all my colleagues to run out and grab a copy. This is a book I would never loan because I would worry about it being lost." —Kevin Ruland, Management Science, MSG-Logistics "The wisdom and practical experience of the authors is obvious. The topics presented are relevant and useful.... By far its greatest strength for me has been the outstanding analogies—tracer bullets, broken windows, and the fabulous helicopter-based explanation of the need for orthogonality, especially in a crisis situation. I have little doubt that this book will eventually become an excellent source of useful information for journeymen programmers and expert mentors alike." —John Lakos, author of *Large-Scale C++ Software Design* "This is the sort of book I will buy a dozen copies of when it comes out so I can give it to my clients." —Eric Vought, Software Engineer "Most modern books on software development fail to cover the basics of what makes a great software developer, instead spending their time on syntax or technology where in reality the greatest leverage possible for any software team is in having talented developers who really know their craft well. An excellent book." —Pete McBreen, Independent Consultant "Since reading this book, I have implemented many of the practical suggestions and tips it contains. Across the board, they have saved my company time and money while helping me get my job done quicker! This should be a desktop reference for everyone who works with code for a living." —Jared Richardson, Senior Software Developer, iRenaissance, Inc. "I would like to see this issued to every new employee at my company...." —Chris Cleeland, Senior Software Engineer, Object Computing, Inc. "If I'm putting together a project, it's the authors of this book that I want. . . . And failing that I'd settle for people who've read their book." —Ward Cunningham Straight from the programming trenches, *The Pragmatic Programmer* cuts through the increasing specialization and technicalities of modern software development to examine the core process--taking a requirement and producing working, maintainable code that delights its users. It covers topics ranging from personal responsibility and career development to architectural techniques for keeping your code flexible and easy to adapt and reuse. Read this book, and you'll learn how to Fight software rot; Avoid the trap of duplicating knowledge; Write flexible, dynamic, and adaptable code; Avoid programming by coincidence; Bullet-proof your code with contracts, assertions, and exceptions; Capture real requirements; Test ruthlessly and effectively; Delight your users; Build teams of pragmatic programmers; and Make your developments more precise with automation. Written as a series of self-contained sections and filled with entertaining anecdotes, thoughtful examples, and interesting analogies, *The Pragmatic Programmer* illustrates the best practices and major pitfalls of many different aspects of software development. Whether you're a new coder, an experienced programmer, or a manager responsible for software projects, use these lessons daily, and you'll quickly see improvements in personal productivity, accuracy, and job satisfaction. You'll learn skills and develop habits and attitudes that form the foundation for long-term success in your career. You'll become a Pragmatic Programmer.

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