

python crash course eric matthes

Python Crash Course Eric Matthes: The Ultimate Guide for Beginners

Python crash course Eric Matthes has gained widespread popularity among aspiring programmers and coding enthusiasts. As one of the most recommended beginner-friendly resources, this book offers a comprehensive introduction to Python programming, making it an ideal starting point for those looking to dive into software development, data analysis, or automation. Written by Eric Matthes, a seasoned educator and programmer, the book emphasizes practical projects and clear explanations, helping learners grasp complex concepts efficiently.

In this article, we will explore the core features of the "Python Crash Course" by Eric Matthes, delve into its structure, benefits, and why it stands out among other beginner programming books. Whether you're a complete novice or someone looking to reinforce foundational Python skills, this detailed guide aims to provide valuable insights into how this resource can accelerate your learning journey.

Overview of Python Crash Course by Eric Matthes

Background and Author Profile

Eric Matthes is an experienced software developer, educator, and author with a passion for teaching programming. His background includes extensive work in web development, game development, and educational content creation. Recognizing the need for an accessible yet thorough introduction to Python, Matthes authored "Python Crash Course," which has since become a bestseller in beginner programming literature.

His approach combines clear, concise explanations with hands-on projects, ensuring learners not only understand theoretical concepts but also develop practical skills. Matthes emphasizes a project-based learning methodology, which is highly effective for retaining knowledge and building a portfolio.

What Makes Python Crash Course Stand Out?

- **Beginner-Friendly Language:** The book is tailored for newcomers with no prior programming experience.
- **Hands-On Projects:** Real-world projects like games and data visualization help solidify learning.
- **Clear Structure:** The content is organized logically, gradually increasing in complexity.

- Practical Approach: Focus on writing code from the start, encouraging active learning.
- Supportive Resources: Includes exercises, quizzes, and answer keys to reinforce understanding.

Detailed Breakdown of the Book's Content

Part 1: Basics of Python Programming

The initial chapters lay the foundation for understanding Python syntax, data types, and control flow. This section is crucial for building confidence and setting the stage for more advanced topics.

- Introduction to Python: Setting up the environment, installing Python, and using IDEs like VSCode or PyCharm.
- Variables and Data Types: Strings, integers, floats, lists, and dictionaries.
- Control Flow: if statements, for and while loops, and Boolean logic.
- Functions: Defining functions, passing arguments, and returning values.
- Classes and Objects: Basic object-oriented programming concepts.

Part 2: Practical Projects and Applications

The second part emphasizes applying learned skills through engaging projects that demonstrate how Python can solve real-world problems.

- Alien Invasion Game: A simple arcade game using Pygame, introducing game development concepts.
- Data Visualization: Using libraries like Matplotlib to create charts and graphs.
- Web Applications: Building simple web apps with frameworks such as Flask.
- Data Analysis: Working with CSV files and performing basic data manipulations.

These projects are designed to reinforce learning, boost confidence, and provide tangible results to showcase in portfolios.

Part 3: Advanced Topics and Best Practices

For learners who wish to deepen their understanding, this section covers more sophisticated concepts:

- File Handling: Reading from and writing to files.
- Error Handling: Using try-except blocks to manage exceptions.
- Testing and Debugging: Techniques for troubleshooting code.
- Working with APIs: Fetching data from external sources.
- Deployment: Preparing projects for sharing or deployment.

This segment prepares readers for real-world development challenges and introduces industry-standard practices.

Why Choose Python Crash Course by Eric Matthes?

1. Structured Learning Path

The book's logical progression ensures learners build their skills step-by-step. Starting from fundamental concepts and gradually moving to complex projects helps prevent overwhelm and fosters confidence.

2. Focus on Practical Skills

Instead of merely theoretical explanations, the book emphasizes coding through projects. This hands-on approach enables learners to apply concepts immediately, which is essential for retention and skill development.

3. Engaging and Accessible Language

Eric Matthes uses simple, understandable language, making complex topics accessible for absolute beginners. The explanations are concise yet thorough, avoiding unnecessary jargon.

4. Rich Supplementary Resources

The book includes exercises, quizzes, and challenge problems that reinforce learning. Additionally, online resources such as GitHub repositories, code examples, and community forums provide ongoing support.

5. Community and Recognition

"Python Crash Course" has garnered positive reviews from educators and learners worldwide. Its popularity is backed by a vibrant community of learners and developers sharing their projects and solutions.

Who Should Read Python Crash Course?

This book is ideal for:

- Complete Beginners: No prior programming experience required.
- Students and Hobbyists: Looking for a comprehensive and engaging introduction.
- Professionals Transitioning Careers: Those switching to tech from other fields.
- Educators: Seeking a structured curriculum for teaching Python.
- Developers Building a Portfolio: Wanting to create demonstrable projects.

How to Maximize Your Learning with Python Crash Course

- Follow the Book Sequentially: The content is designed for a logical progression, so sticking to the order maximizes understanding.
- Practice Regularly: Code daily or several times a week to build muscle memory.
- Complete All Exercises: These reinforce concepts and uncover gaps in understanding.
- Engage with Community: Join online forums or study groups to discuss challenges.
- Work on Personal Projects: Apply skills by creating your own small projects beyond the book.
- Supplement with Online Resources: Use tutorials, videos, and documentation to deepen your knowledge.

Conclusion: Is Python Crash Course by Eric Matthes Right for You?

If you're a beginner eager to learn Python with a practical, project-based approach, "Python Crash Course" by Eric Matthes is an excellent choice. Its structured content, engaging projects, and clear explanations make it an accessible entry point into programming. By dedicating time and effort, learners can develop a solid foundation in Python, opening doors to various career opportunities in software development, data science, automation, and more.

Starting your programming journey with this book can set a strong groundwork, making subsequent advanced topics easier to grasp. Whether you're aiming to build simple scripts or develop complex applications, "Python Crash Course" provides the essential knowledge and confidence needed to succeed.

Meta Description: Discover the comprehensive guide to "Python Crash Course" by Eric Matthes. Learn why this beginner-friendly book is ideal for mastering Python programming through practical projects and clear explanations.

Frequently Asked Questions

What are the key topics covered in 'Python Crash Course' by Eric Matthes?

The book covers fundamental Python concepts including variables, data types, control structures, functions, classes, and how to build projects like simple games and web applications to solidify understanding.

Is 'Python Crash Course' suitable for complete beginners?

Yes, 'Python Crash Course' is designed for beginners with no prior programming experience, providing clear explanations and practical projects to help learners grasp core concepts effectively.

How does 'Python Crash Course' by Eric Matthes differ from other Python books?

It emphasizes hands-on projects and real-world applications, making it highly practical for beginners. The book also features engaging exercises and clear, beginner-friendly explanations that set it apart from more theoretical texts.

Are there online resources or supplementary materials for 'Python Crash Course'?

Yes, Eric Matthes provides a companion website with project files, solutions, and additional exercises to enhance the learning experience and help readers practice their skills.

What are some common projects included in 'Python Crash Course' to reinforce learning?

The book features projects such as building a space invaders game, creating data visualizations, and developing a web application, all designed to help learners apply Python skills practically.

Additional Resources

Python Crash Course Eric Matthes: A Comprehensive Review and Deep Dive

Introduction

In the world of programming education, few books have managed to garner the same reputation for clarity, accessibility, and depth as "Python Crash Course" by Eric Matthes. Published initially in 2015, this book has become a staple for beginners eager to learn Python, as well as for educators seeking a structured curriculum. With its practical approach, engaging projects, and straightforward explanations, Matthes's work stands out as an essential resource for aspiring programmers.

This review aims to dissect the various aspects of "Python Crash Course", exploring its structure, content quality, pedagogical approach, strengths, weaknesses, and overall impact on learners.

Overview of the Book's Structure

"Python Crash Course" is divided into two main parts:

1. Part I: Basics of Python Programming
2. Part II: Projects and Practical Applications

This organization allows readers to first grasp fundamental programming concepts before applying their knowledge through hands-on projects.

Part I: Fundamentals

- Introduction to Python

Covers the installation process, setting up the development environment, and understanding the basic syntax.

- Variables and Data Types

An in-depth look at strings, numbers, lists, dictionaries, and other fundamental data structures.

- Control Flow

Explains if statements, loops, and logical operators, emphasizing how to control the flow of a program.

- Functions and Modules

Focuses on writing reusable code, understanding scope, and leveraging Python's module system.

- Classes and Object-Oriented Programming

Introduces classes, objects, inheritance, and encapsulation, laying the groundwork for OOP concepts.

- File Handling and Exceptions

Demonstrates reading from and writing to files, as well as managing errors gracefully.

Part II: Projects

- Alien Invasion Game

A beginner-friendly game built with Pygame, illustrating game development fundamentals.

- Data Visualization

Utilizes libraries like Matplotlib to create visual representations of data.

- Web Applications and APIs

Shows how Python can be used in web development contexts, including working with APIs.

This balanced mix of theory and practice ensures that readers not only learn Python syntax but also understand its real-world applications.

Pedagogical Approach

Eric Matthes employs a student-centered, approachable teaching style characterized by:

- Clear Explanations: Concepts are broken down into digestible pieces, avoiding unnecessary jargon.
- Hands-On Projects: Learning by doing is emphasized, with each project reinforcing previously learned concepts.
- Incremental Complexity: The content gradually escalates in difficulty, ensuring learners build confidence step-by-step.
- Practical Examples: Real-world scenarios make abstract ideas more relatable.
- Code Readability: Emphasis on writing clean, readable code aligns with Python's philosophy.

This method fosters an engaging learning environment, making complex topics seem less intimidating.

Strengths of "Python Crash Course" by Eric Matthes

1. Comprehensive Coverage for Beginners

The book covers a broad spectrum of foundational topics, ensuring that learners develop a solid understanding of Python programming essentials. From syntax to more advanced topics like classes and file handling, readers receive a well-rounded introduction.

2. Focus on Practical Skills

Projects like the Alien Invasion game, data visualization, and web API interactions translate theoretical knowledge into tangible skills. This project-based approach enhances retention and prepares learners for real-world programming tasks.

3. Accessible Language and Clear Explanations

Matthes writes in a friendly, approachable tone, making complex concepts accessible. The explanations are concise yet comprehensive, catering to readers without a prior

programming background.

4. Well-Structured Curriculum

The logical progression from basics to advanced topics allows learners to follow a clear learning path without feeling overwhelmed. The incremental difficulty helps build confidence and competence.

5. Encourages Good Coding Practices

Throughout the book, emphasis is placed on writing clean, Pythonic code. This instills good habits early on, which is crucial for long-term success as a programmer.

6. Quality of Code Examples

Code snippets are carefully crafted, easy to understand, and follow Python's best practices. The inclusion of comments helps beginners comprehend the purpose of each part of the code.

7. Resource Richness

The book offers additional resources, such as exercises, challenges, and references, enabling learners to deepen their understanding beyond the pages.

Weaknesses and Limitations

While "Python Crash Course" is highly praised, it is not without some limitations:

1. Limited Depth in Advanced Topics

The book is tailored primarily for beginners. As such, it doesn't delve deeply into advanced topics like decorators, generators, multithreading, or in-depth web frameworks. Learners seeking an in-depth understanding of advanced Python may need supplementary resources.

2. Focus on Python 3

While the book emphasizes Python 3, some legacy code or older tutorials may still reference Python 2. However, this is less of an issue now as Python 2 has been deprecated.

3. Pygame and Web Projects Require External Setup

Projects involving Pygame or web APIs assume some prior setup and familiarity with external libraries. Beginners unfamiliar with installing packages or setting up environments might face initial hurdles.

4. Lack of In-Depth Testing and Debugging Guidance

Although the book introduces exception handling, it does not extensively cover testing methodologies or debugging techniques, which are vital skills for professional development.

Audience and Ideal Readership

"Python Crash Course" is best suited for:

- Complete Beginners: No prior programming experience required.
- Educators and Instructors: Looking for a structured curriculum.
- Self-Learners: Motivated individuals wanting a hands-on approach.
- Students and Hobbyists: Interested in game development, data visualization, or web APIs.

Advanced programmers may find the content too introductory, but even they can appreciate the clarity and project ideas.

How It Stands Out in the Python Education Landscape

Compared to other beginner books, "Python Crash Course" distinguishes itself through:

- Balanced Theoretical and Practical Content: Not just theory, but also many real-world projects.
- Engaging Projects: The Alien Invasion game and data visualization projects add excitement.
- Concise Yet Complete: Covers essential topics without overwhelming the learner.
- Clear and Friendly Writing Style: Encourages confidence and curiosity.

Additionally, the companion resources and community support around the book (e.g., online forums, GitHub repositories) enhance its utility.

Recommendations for Maximizing Learning from the Book

- Follow the Projects Actively: Don't just read; code along and experiment.
- Supplement with Online Resources: Explore Python documentation, tutorials, and community forums.
- Practice Regularly: Reinforce learning by solving additional problems or creating personal projects.
- Explore Advanced Topics Separately: Use supplementary books or courses to deepen understanding beyond the scope of this book.

Final Verdict

"Python Crash Course" by Eric Matthes is an exceptional resource that effectively demystifies Python for beginners. Its combination of clear explanations, practical projects, and structured curriculum makes it a standout choice for those starting their programming journey. While it may not cover every advanced topic, it provides a robust foundation that paves the way for further exploration.

If you are seeking an engaging, well-organized introduction to Python that emphasizes hands-on learning, this book is highly recommended. It not only teaches you how to write Python code but also instills good coding habits and problem-solving skills essential for any aspiring developer.

Summary

Aspect Highlights
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Target Audience Beginners, students, hobbyists
Strengths Comprehensive coverage, project-based learning, clear explanations
Weaknesses Limited depth in advanced topics, setup complexity for some projects
Unique Features Engaging projects, friendly tone, emphasis on best practices
Overall Rating Highly recommended for foundational Python learning

Embark on your Python journey with "Python Crash Course" by Eric Matthes, and transform your curiosity into coding competence!

[Python Crash Course Eric Matthes](#)

python crash course eric matthes: *Python Crash Course, 2nd Edition* Eric Matthes, 2019-05-21 The best-selling Python book in the world, with over 1 million copies sold! A fast-paced, no-nonsense, updated guide to programming in Python. If you've been thinking about learning how to code or picking up Python, this internationally bestselling guide to the most popular programming language is your quickest, easiest way to get started and go! Even if you have no experience whatsoever, Python Crash Course, 2nd Edition, will have you writing programs, solving problems, building computer games, and creating data visualizations in no time. You'll begin with basic concepts like variables, lists, classes, and loops—with the help of fun skill-strengthening exercises for every topic—then move on to making interactive programs and best practices for testing your code. Later chapters put your new knowledge into play with three cool projects: a 2D Space Invaders-style arcade game, a set of responsive data visualizations you'll build with Python's handy libraries (Pygame, Matplotlib, Plotly, Django), and a customized web app you can deploy online. Why wait any longer? Start your engine and code!

python crash course eric matthes: *Python Crash Course, 2nd Edition* Eric Matthes, 2019-05-03 The best-selling Python book in the world, with over 1 million copies sold! A fast-paced, no-nonsense, updated guide to programming in Python. If you've been thinking about learning how to code or picking up Python, this internationally bestselling guide to the most popular programming language is your quickest, easiest way to get started and go! Even if you have no experience

whatsoever, Python Crash Course, 2nd Edition, will have you writing programs, solving problems, building computer games, and creating data visualizations in no time. You'll begin with basic concepts like variables, lists, classes, and loops—with the help of fun skill-strengthening exercises for every topic—then move on to making interactive programs and best practices for testing your code. Later chapters put your new knowledge into play with three cool projects: a 2D Space Invaders-style arcade game, a set of responsive data visualizations you'll build with Python's handy libraries (Pygame, Matplotlib, Plotly, Django), and a customized web app you can deploy online. Why wait any longer? Start your engine and code!

python crash course eric matthes: Python Crash Course, 3rd Edition Eric Matthes, 2023-01-10 Python Crash Course is the world's bestselling programming book, with over 1,500,000 copies sold to date! Python Crash Course is the world's best-selling guide to the Python programming language. This fast-paced, thorough introduction will have you writing programs, solving problems, and developing functioning applications in no time. You'll start by learning basic programming concepts, such as variables, lists, classes, and loops, and practice writing clean code with exercises for each topic. You'll also learn how to make your programs interactive and test your code safely before adding it to a project. You'll put your new knowledge into practice by creating a Space Invaders-inspired arcade game, building a set of data visualizations with Python's handy libraries, and deploying a simple application online. As you work through the book, you'll learn how to: Use powerful Python libraries and tools, including pytest, Pygame, Matplotlib, Plotly, and Django Make increasingly complex 2D games that respond to keypresses and mouse clicks Generate interactive data visualizations using a variety of datasets Build apps that allow users to create accounts and manage their own data, and deploy your apps online Troubleshoot coding errors and solve common programming problems New to this edition: This third edition is completely revised to reflect the latest in Python code. New and updated coverage includes VS Code for text editing, the pathlib module for file handling, pytest for testing your code, as well as the latest features of Matplotlib, Plotly, and Django. If you've been thinking about digging into programming, Python Crash Course will provide you with the skills to write real programs fast. Why wait any longer? Start your engines and code! Covers Python 3.x

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python crash course eric matthes: *Python Crash Course* Eric Matthes, 2019

python crash course eric matthes: **The Road to Alaska** Eric Matthes, 2017-02-26 Many people cross the United States on a bicycle each summer, but few go on to circle the entire North

American continent. At 26 years old, Eric Matthes quit his job and flew to Seattle for the start of a 14,000-mile adventure. He rode across to Maine, down to Florida, over to California, and up to Alaska. The Road to Alaska is the story of the places he went, the people he met, and the lessons he learned from living on the edge of society for a full year.

python crash course eric matthes: *PYTHON CRASH COURSE* Mark Matthes, Eric Lutz, Would you like to start programming with Python? Are you interested in learning this language? Then this book is perfect for you! There are a lot of great options for working with the Python language, and it is not going to take very long before you can work with this kind of writing. There are also a lot of benefits to this language, even when we spend some time comparing it to some of the other coding languages out there. Keep in mind that there are a lot of different coding languages out there that you can focus your attention on. And sometimes, all of these options can make it hard to know which one is the best for your needs. Even with these options, the Python language is going to provide us with a lot of power to handle most of the coding that we want to do, while still being easy to read and learn, and can work with all of the operating systems that you would like. This book covers: Functions and Modules Defining Your Functions Working with Your Module Working with Files Using A for Loop to Write and Read Text Files And so much more! This guidebook is going to take the Python language to the next level and look at some of the more advanced features that you can enjoy with this kind of writing, but when you look at some of the codes, even some of these that are more advanced than what you may have worked with in the past, you will find that it is easy to write some codes that have a lot of power, and even easy to complete your projects. Ready to get started? Grab your Copy Now!

python crash course eric matthes: *Beyond the Basic Stuff with Python* Al Sweigart, 2020-12-22 BRIDGE THE GAP BETWEEN NOVICE AND PROFESSIONAL You've completed a basic Python programming tutorial or finished Al Sweigart's bestseller, *Automate the Boring Stuff with Python*. What's the next step toward becoming a capable, confident software developer? Welcome to *Beyond the Basic Stuff with Python*. More than a mere collection of advanced syntax and masterful tips for writing clean code, you'll learn how to advance your Python programming skills by using the command line and other professional tools like code formatters, type checkers, linters, and version control. Sweigart takes you through best practices for setting up your development environment, naming variables, and improving readability, then tackles documentation, organization and performance measurement, as well as object-oriented design and the Big-O algorithm analysis commonly used in coding interviews. The skills you learn will boost your ability to program—not just in Python but in any language. You'll learn: Coding style, and how to use Python's Black auto-formatting tool for cleaner code Common sources of bugs, and how to detect them with static analyzers How to structure the files in your code projects with the Cookiecutter template tool Functional programming techniques like lambda and higher-order functions How to profile the speed of your code with Python's built-in `timeit` and `cProfile` modules The computer science behind Big-O algorithm analysis How to make your comments and docstrings informative, and how often to write them How to create classes in object-oriented programming, and why they're used to organize code Toward the end of the book you'll read a detailed source-code breakdown of two classic command-line games, the Tower of Hanoi (a logic puzzle) and Four-in-a-Row (a two-player tile-dropping game), and a breakdown of how their code follows the book's best practices. You'll test your skills by implementing the program yourself. Of course, no single book can make you a professional software developer. But *Beyond the Basic Stuff with Python* will get you further down that path and make you a better programmer, as you learn to write readable code that's easy to debug and perfectly Pythonic Requirements: Covers Python 3.6 and higher

python crash course eric matthes: *JavaScript Crash Course* Nick Morgan, 2024-03-05 A fast-paced, thorough programming introduction that will have you writing your own software and web applications in no time. Like *Python Crash Course*, this hands-on guide is a must-have for anyone who wants to learn how to code from the ground up—this time using the popular JavaScript programming language. *Learn JavaScript—Fast!* *JavaScript Crash Course* is a fun-filled, fast-paced

introduction to programming with JavaScript. Dive right in and you'll be writing code, solving problems, and building working web applications and games in no time. You'll start by learning fundamental programming concepts, such as variables, arrays, objects, functions, conditionals, loops, classes, and more. Aided by engaging examples and hands-on exercises, you'll build on this foundation and combine JavaScript with HTML and CSS to create interactive web applications that you can run right away. Then you'll put your new skills into play with three substantial projects: a Pong-style game with a virtual opponent, an app that generates electronic music, and a platform for visualizing data fetched from an API. Along the way, you'll learn how to:

- Update web pages in real time by manipulating the Document Object Model
- Trigger functions in response to events like key presses and mouse clicks
- Generate graphics and animations with JavaScript and HTML's Canvas element
- Visualize data with the D3.js library and scalable vector graphics (SVG)
- Make electronic music with Tone.js and the Web Audio API

If you've been thinking about digging into programming, JavaScript Crash Course will get you writing real programs fast. Why wait any longer? Jump on your magic carpet and ride!

python crash course eric matthes: *Effective C* Robert C. Seacord, 2020-08-04 A detailed introduction to the C programming language for experienced programmers. The world runs on code written in the C programming language, yet most schools begin the curriculum with Python or Java. *Effective C* bridges this gap and brings C into the modern era—covering the modern C17 Standard as well as potential C2x features. With the aid of this instant classic, you'll soon be writing professional, portable, and secure C programs to power robust systems and solve real-world problems. Robert C. Seacord introduces C and the C Standard Library while addressing best practices, common errors, and open debates in the C community. Developed together with other C Standards committee experts, *Effective C* will teach you how to debug, test, and analyze C programs. You'll benefit from Seacord's concise explanations of C language constructs and behaviors, and from his 40 years of coding experience. You'll learn:

- How to identify and handle undefined behavior in a C program
- The range and representations of integers and floating-point values
- How dynamic memory allocation works and how to use nonstandard functions
- How to use character encodings and types
- How to perform I/O with terminals and filesystems using C Standard streams and POSIX file descriptors
- How to understand the C compiler's translation phases and the role of the preprocessor
- How to test, debug, and analyze C programs

Effective C will teach you how to write professional, secure, and portable C code that will stand the test of time and help strengthen the foundation of the computing world.

python crash course eric matthes: *Automate the Boring Stuff with Python, 2nd Edition* Al Sweigart, 2019-11-12 Learn how to code while you write programs that effortlessly perform useful feats of automation! The second edition of this international fan favorite includes a brand-new chapter on input validation, Gmail and Google Sheets automations, tips for updating CSV files, and more. If you've ever spent hours renaming files or updating spreadsheet cells, you know how tedious tasks like these can be. But what if you could have your computer do them for you? *Automate the Boring Stuff with Python, 2nd Edition* teaches even the technically uninclined how to write programs that do in minutes what would take hours to do by hand—no prior coding experience required! This new, fully revised edition of Al Sweigart's bestselling Pythonic classic, *Automate the Boring Stuff with Python*, covers all the basics of Python 3 while exploring its rich library of modules for performing specific tasks, like scraping data off the Web, filling out forms, renaming files, organizing folders, sending email responses, and merging, splitting, or encrypting PDFs. There's also a brand-new chapter on input validation, tutorials on automating Gmail and Google Sheets, tips on automatically updating CSV files, and other recent feats of automations that improve your efficiency. Detailed, step-by-step instructions walk you through each program, allowing you to create useful tools as you build out your programming skills, and updated practice projects at the end of each chapter challenge you to improve those programs and use your newfound skills to automate similar tasks. Boring tasks no longer have to take to get through—and neither does learning Python!

python crash course eric matthes: *Artificial Intelligence with Microsoft Power BI* Jen Stirrup,

Thomas J. Weinandy, 2024-03-28 Advance your Power BI skills by adding AI to your repertoire at a practice level. With this practical book, business-oriented software engineers and developers will learn the terminologies, practices, and strategy necessary to successfully incorporate AI into your business intelligence estate. Jen Stirrup, CEO of AI and BI leadership consultancy Data Relish, and Thomas Weinandy, research economist at Upside, show you how to use data already available to your organization. Springboarding from the skills that you already possess, this book adds AI to your organization's technical capability and expertise with Microsoft Power BI. By using your conceptual knowledge of BI, you'll learn how to choose the right model for your AI work and identify its value and validity. Use Power BI to build a good data model for AI Demystify the AI terminology that you need to know Identify AI project roles, responsibilities, and teams for AI Use AI models, including supervised machine learning techniques Develop and train models in Azure ML for consumption in Power BI Improve your business AI maturity level with Power BI Use the AI feedback loop to help you get started with the next project

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Steve Klabnik, Carol Nichols, 2019-09-03 The official book on the Rust programming language, written by the Rust development team at the Mozilla Foundation, fully updated for Rust 2018. The Rust Programming Language is the official book on Rust: an open source systems programming language that helps you write faster, more reliable software. Rust offers control over low-level details (such as memory usage) in combination with high-level ergonomics, eliminating the hassle traditionally associated with low-level languages. The authors of The Rust Programming Language, members of the Rust Core Team, share their knowledge and experience to show you how to take full advantage of Rust's features—from installation to creating robust and scalable programs. You'll begin with basics like creating functions, choosing data types, and binding variables and then move on to more advanced concepts, such as: Ownership and borrowing, lifetimes, and traits Using Rust's memory safety guarantees to build fast, safe programs Testing, error handling, and effective refactoring Generics, smart pointers, multithreading, trait objects, and advanced pattern matching Using Cargo, Rust's built-in package manager, to build, test, and document your code and manage dependencies How best to use Rust's advanced compiler with compiler-led programming techniques You'll find plenty of code examples throughout the book, as well as three chapters dedicated to building complete projects to test your learning: a number guessing game, a Rust implementation of a command line tool, and a multithreaded server. New to this edition: An extended section on Rust macros, an expanded chapter on modules, and appendixes on Rust development tools and editions.

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