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KEY=BLUEPRINTS - LIZETH SAVAGE

Tkinter GUI Application Development Blueprints - Second Edition Geometry Management, Event Handling, and more About This Book A Practical, guide to learn the application of Python and GUI programming with tkinter Create multiple cross-platform real-world projects by integrating host of third party libraries and tools Learn to build beautiful and

highly interactive user interfaces, targeting multiple devices. Who This Book Is For This book is for a beginner to intermediate-level Pythonists who want to build modern, cross-platform GUI applications with the amazingly powerful Tkinter. Prior knowledge of Tkinter is required. What You Will Learn A Practical, guide to help you learn the application of Python and GUI programming with Tkinter Create multiple, cross-platform, real-world projects by integrating a host of third-party libraries and tools Learn to build beautiful and highly interactive user interfaces, targeting multiple devices. In Detail Tkinter is the built-in GUI package that comes with standard Python distributions. It is a cross-platform package, which means you build once and deploy everywhere. It is simple to use and intuitive in nature, making it suitable for programmers and non-programmers alike. This book will help you master the art of GUI programming. It delivers the bigger picture of GUI programming by building real-world, productive, and fun applications such as a text editor, drum machine, game of chess, audio player, drawing application, piano tutor, chat application, screen saver, port scanner, and much more. In every project, you will build on the skills acquired in the previous project and gain more expertise. You will learn to write multithreaded programs, network programs, database-driven programs, asyncio based programming and more. You will also get to know the modern best practices involved in writing GUI apps. With its rich source of sample code, you can build upon the knowledge gained with this book and use it in your own projects in the discipline of your choice. Style and approach An easy-to-follow guide, full of hands-on examples of real-world GUI programs. The first chapter is a must-read as it explains most of the things you need to get started with writing GUI programs with Tkinter. Each subsequent chapter is a stand-alone project that discusses some aspects of GUI programming in detail. These chapters can be read sequentially or randomly, depending on the reader's experience with Python. Downloading the example code for this book You can download the example code files ... Tkinter GUI Application Development Blueprints, Second Edition Build nine projects by working with widgets, geometry management, event handling, and more, 2nd Edition [Packt Publishing Ltd](#) Geometry Management, Event Handling, and more Key Features A Practical, guide to learn the application of Python and GUI programming with tkinter Create multiple cross-platform real-world projects by integrating host of third party libraries and tools Learn to build beautiful and highly interactive user interfaces, targeting multiple devices. Book Description Tkinter is the built-in GUI package that comes with standard Python distributions. It is a cross-platform package, which means you build once and deploy everywhere. It is simple to use and intuitive in nature, making it suitable for programmers and non-programmers alike. This book will help you master the art of GUI programming. It delivers the bigger picture of GUI programming by building real-world, productive, and fun applications such as a text editor, drum machine, game of chess, audio player, drawing application, piano tutor, chat application, screen saver, port scanner, and much more. In

every project, you will build on the skills acquired in the previous project and gain more expertise. You will learn to write multithreaded programs, network programs, database-driven programs, asyncio based programming and more. You will also get to know the modern best practices involved in writing GUI apps. With its rich source of sample code, you can build upon the knowledge gained with this book and use it in your own projects in the discipline of your choice.

What you will learn -A Practical, guide to help you learn the application of Python and GUI programming with Tkinter - Create multiple, cross-platform, real-world projects by integrating a host of third-party libraries and tools - Learn to build beautiful and highly interactive user interfaces, targeting multiple devices. Who this book is for This book is for a beginner to intermediate-level Pythonists who want to build modern, cross-platform GUI applications with the amazingly powerful Tkinter. Prior knowledge of Tkinter is required. Tkinter GUI Application Development Blueprints Packt Publishing Ltd Master GUI programming in Tkinter as you design, implement, and deliver ten real-world applications from start to finish About This Book Conceptualize and build state-of-art GUI applications with Tkinter Tackle the complexity of just about any size GUI application with a structured and scalable approach A project-based, practical guide to get hands-on into Tkinter GUI development Who This Book Is For Software developers, scientists, researchers, engineers, students, or programming hobbyists with basic familiarity in Python will find this book interesting and informative. People familiar with basic programming constructs in other programming language can also catch up with some brief reading on Python. No GUI programming experience is expected. What You Will Learn Get to know the basic concepts of GUI programming, such as Tkinter top-level widgets, geometry management, event handling, using callbacks, custom styling, and dialogs Create apps that can be scaled in size or complexity without breaking down the core Write your own GUI framework for maximum code reuse Build apps using both procedural and OOP styles, understanding the strengths and limitations of both styles Learn to structure and build large GUI applications based on Model-View-Controller (MVC) architecture Build multithreaded and database-driven apps Create apps that leverage resources from the network Learn basics of 2D and 3D animation in GUI applications Develop apps that can persist application data with object serialization and tools such as configparser In Detail Tkinter is the built-in GUI package that comes with standard Python distributions. It is a cross-platform package, which means you build once and deploy everywhere. It is simple to use and intuitive in nature, making it suitable for programmers and non-programmers alike. This book will help you master the art of GUI programming. It delivers the bigger picture of GUI programming by building real-world, productive, and fun applications such as a text editor, drum machine, game of chess, media player, drawing application, chat application, screen saver, port scanner, and many more. In every project, you will build on the skills acquired in the previous project and gain more expertise. You will learn to write

multithreaded programs, network programs, database driven programs and more. You will also get to know the modern best practices involved in writing GUI apps. With its rich source of sample code, you can build upon the knowledge gained with this book and use it in your own projects in the discipline of your choice. Style and approach An easy-to-follow guide, full of hands-on examples of real-world GUI programs. The first chapter is a must read as it explains most of the things you need to get started with writing GUI programs with Tkinter. Each subsequent chapter is a stand-alone project that discusses some aspects of GUI programming in detail. These chapters can be read sequentially or randomly depending upon the readers experience with Python. Tkinter GUI Application Development Cookbook A practical solution to your GUI development problems with Python and Tkinter [Packt Publishing Ltd](#) Discover solutions to all your Tkinter and Python GUI development problems Key Features Integrate efficient Python GUI programming techniques with Tkinter Efficiently implement advanced MVC architectures in your Python GUI apps Solve all your problems related to Tkinter and Python GUI development Book Description As one of the more versatile programming languages, Python is well-known for its batteries-included philosophy, which includes a rich set of modules in its standard library; Tkinter is the library included for building desktop applications. Due to this, Tkinter is a common choice for rapid GUI development, and more complex applications can benefit from the full capabilities of this library. This book covers all of your Tkinter and Python GUI development problems and solutions. Tkinter GUI Application Development Cookbook starts with an overview of Tkinter classes and at the same time provides recipes for basic topics, such as layout patterns and event handling. Next, we cover how to develop common GUI patterns, such as entering and saving data, navigating through menus and dialogs, and performing long-running actions in the background. You can then make your apps leverage network resources effectively and perform graphical operations on a canvas and related tasks such as detecting collisions between items. Finally, this book covers using themed widgets, an extension of Tk widgets that have a more native look and feel. Finally, this book covers using the canvas and themed widgets. By the end of the book, you will have an in-depth knowledge of Tkinter classes, and will know how to use them to build efficient and rich GUI applications. What you will learn Add widgets and handle user events Lay out widgets within windows using frames and the different geometry managers Configure widgets so that they have a customized appearance and behavior Improve the navigation of your apps with menus and dialogs Apply object-oriented programming techniques in Tkinter applications Use threads to achieve responsiveness and update the GUI Explore the capabilities of the canvas widget and the types of items that can be added to it Extend Tkinter applications with the TTK (themed Tkinter) module Who this book is for This book is for Python developers who are familiar with the basics of the language syntax, data structures, and OOP. You do not need previous experience with Tkinter or other

GUI development libraries. Python GUI Programming Cookbook [Packt Publishing Ltd](#) **Over 80 object-oriented recipes to help you create mind-blowing GUIs in Python About This Book Use object-oriented programming to develop amazing GUIs in Python Create a working GUI project as a central resource for developing your Python GUIs Packed with easy-to-follow recipes to help you develop code using the latest released version of Python Who This Book Is For If you are a Python programmer with intermediate level knowledge of GUI programming and want to learn how to create beautiful, effective, and responsive GUIs using the freely available Python GUI frameworks, this book is for you. What You Will Learn Create amazing GUIs with Python's built-in Tkinter module Customize the GUIs by using layout managers to arrange the GUI widgets Advance to an object-oriented programming style using Python Develop beautiful charts using the free Matplotlib Python module Use threading in a networked environment to make the GUIs responsive Discover ways to connect the GUIs to a database Understand how unit tests can be created and internationalize the GUI Extend the GUIs with free Python frameworks using best practices In Detail Python is a multi-domain, interpreted programming language. It is a widely used general-purpose, high-level programming language. It is often used as a scripting language because of its forgiving syntax and compatibility with a wide variety of different eco-systems. Its flexible syntax enables developers to write short scripts while at the same time, they can use object-oriented concepts to develop very large projects. Python GUI Programming Cookbook follows a task-based approach to help you create beautiful and very effective GUIs with the least amount of code necessary. This book uses the simplest programming style, using the fewest lines of code to create a GUI in Python, and then advances to using object-oriented programming in later chapters. If you are new to object-oriented programming (OOP), this book will teach you how to take advantage of the OOP coding style in the context of creating GUIs written in Python. Throughout the book, you will develop an entire GUI application, building recipe upon recipe, connecting the GUI to a database. In the later chapters, you will explore additional Python GUI frameworks, using best practices. You will also learn how to use threading to ensure your GUI doesn't go unresponsive. By the end of the book, you will be an expert in Python GUI programming to develop a common set of GUI applications. Style and approach Every recipe in this programming cookbook solves a problem you might encounter in your programming career. At the same time, most of the recipes build on each other to create an entire, real-life GUI application. Tkinter GUI Programming by Example Learn to create modern GUIs using Tkinter by building real-world projects in Python** [Packt Publishing Ltd](#) **Leverage the power of Python and its de facto GUI framework to build highly interactive interfaces Key Features The fundamentals of Python and GUI programming with Tkinter. Create multiple cross-platform projects by integrating a host of third-party libraries and tools. Build beautiful and highly-interactive user interfaces that target multiple devices. Book Description Tkinter is a**

modular, cross-platform application development toolkit for Python. When developing GUI-rich applications, the most important choices are which programming language(s) and which GUI framework to use. Python and Tkinter prove to be a great combination. This book will get you familiar with Tkinter by having you create fun and interactive projects. These projects have varying degrees of complexity. We'll start with a simple project, where you'll learn the fundamentals of GUI programming and the basics of working with a Tkinter application. After getting the basics right, we'll move on to creating a project of slightly increased complexity, such as a highly customizable Python editor. In the next project, we'll crank up the complexity level to create an instant messaging app. Toward the end, we'll discuss various ways of packaging our applications so that they can be shared and installed on other machines without the user having to learn how to install and run Python programs. What you will learn

Create a scrollable frame via theCanvas widget Use the pack geometry manager andFrame widget to control layout Learn to choose a data structurefor a game Group Tkinter widgets, such asbuttons, canvases, and labels Create a highly customizablePython editor Design and lay out a chat window Who this book is for This book is for beginners to GUI programming who haven't used Tkinter yet and are eager to start building great-looking and user-friendly GUIs. Prior knowledge of Python programming is expected. Python GUI Programming with Tkinter Develop responsive and powerful GUI applications with Tkinter [Packt Publishing Ltd](#) Find out how to create visually stunning and feature-rich applications by empowering Python's built-in Tkinter GUI toolkit Key Features Explore Tkinter's powerful features to easily design and customize your GUI application Learn the basics of 2D and 3D animation in GUI applications. Learn to integrate stunning Data Visualizations using Tkinter Canvas and Matplotlib. Book Description Tkinter is a lightweight, portable, and easy-to-use graphical toolkit available in the Python Standard Library, widely used to build Python GUIs due to its simplicity and availability. This book teaches you to design and build graphical user interfaces that are functional, appealing, and user-friendly using the powerful combination of Python and Tkinter. After being introduced to Tkinter, you will be guided step-by-step through the application development process. Over the course of the book, your application will evolve from a simple data-entry form to a complex data management and visualization tool while maintaining a clean and robust design. In addition to building the GUI, you'll learn how to connect to external databases and network resources, test your code to avoid errors, and maximize performance using asynchronous programming. You'll make the most of Tkinter's cross-platform availability by learning how to maintain compatibility, mimic platform-native look and feel, and build executables for deployment across popular computing platforms. By the end of this book, you will have the skills and confidence to design and build powerful high-end GUI applications to solve real-world problems. What you will learn Implement the tools provided by Tkinter to design beautiful GUIs

Discover cross-platform development through minor customizations in your existing application Visualize graphs in real time as data comes in using Tkinter's animation capabilities Use PostgreSQL authentication to ensure data security for your application Write unit tests to avoid regressions when updating code Who this book is for This book will appeal to developers and programmers who would like to build GUI-based applications. Knowledge of Python is a prerequisite. Boost C++ Application Development Cookbook Packt Publishing Ltd Learn to build applications faster and better by leveraging the real power of Boost and C++ About This Book Learn to use the Boost libraries to simplify your application development Learn to develop high quality, fast and portable applications Learn the relations between Boost and C++11/C++4/C++17 Who This Book Is For This book is for developers looking to improve their knowledge of Boost and who would like to simplify their application development processes. Prior C++ knowledge and basic knowledge of the standard library is assumed. What You Will Learn Get familiar with new data types for everyday use Use smart pointers to manage resources Get to grips with compile-time computations and assertions Use Boost libraries for multithreading Learn about parallel execution of different task Perform common string-related tasks using Boost libraries Split all the processes, computations, and interactions to tasks and process them independently Learn the basics of working with graphs, stacktracing, testing and interprocess communications Explore different helper macros used to detect compiler, platform and Boost features In Detail If you want to take advantage of the real power of Boost and C++ and avoid the confusion about which library to use in which situation, then this book is for you. Beginning with the basics of Boost C++, you will move on to learn how the Boost libraries simplify application development. You will learn to convert data such as string to numbers, numbers to string, numbers to numbers and more. Managing resources will become a piece of cake. You'll see what kind of work can be done at compile time and what Boost containers can do. You will learn everything for the development of high quality fast and portable applications. Write a program once and then you can use it on Linux, Windows, MacOS, Android operating systems. From manipulating images to graphs, directories, timers, files, networking - everyone will find an interesting topic. Be sure that knowledge from this book won't get outdated, as more and more Boost libraries become part of the C++ Standard. PYTHON FOR DESKTOP APPLICATIONS How to develop, pack and deliver Python applications with TkInter and Kivy [TRAN DUC LOI](#) Chapter 1, Introduction shows you some fundamental concepts of Python such as pip, wheel, virtual environment, GIL, CLI and GUI, which tools we will use, how to set them up. Chapter 2, Create a File Downloader with TKInter introduces how to develop a Python file downloader application with simple GUI using TKInter library. This chapter also guides you how to pack your application using PyInstaller and make a setup using NSIS. Chapter 3, Create a Music Player with Kivy walks through how make a music player with Kivy. We will start with a very simple Kivy

application then eventually build a more complex one. We also pack our music player up using PyInstaller. Chapter 4, Debugging shows you how to debug your applications if something wrong. Useful tips and handy DependencyWalker debug tool guide. In this chapter, you will also be introduced to cx_Freeze to build/freeze a wx_Python application. Kivy - Interactive Applications and Games in Python [Packt Publishing Ltd](#) Kivy - Interactive Applications and Games in Python Second Edition, will equip you with all the necessary knowledge to create interactive, responsive, and cross-platform applications and games. This book introduces the Kivy language and the necessary components so you can implement a graphical user interface (GUI) and learn techniques to handle events, detect gestures, and control multi-touch actions. You will learn strategies to animate your applications, and obtain interactive, professional-looking, and responsive results. You will be applying this knowledge throughout the book by developing three applications and tackling their diverse programming challenges. The Hitchhiker's Guide to Python Best Practices for Development "O'Reilly Media, Inc." The Hitchhiker's Guide to Python takes the journeyman Pythonista to true expertise. More than any other language, Python was created with the philosophy of simplicity and parsimony. Now 25 years old, Python has become the primary or secondary language (after SQL) for many business users. With popularity comes diversity—and possibly dilution. This guide, collaboratively written by over a hundred members of the Python community, describes best practices currently used by package and application developers. Unlike other books for this audience, The Hitchhiker's Guide is light on reusable code and heavier on design philosophy, directing the reader to excellent sources that already exist. Python Game Programming By Example [Packt Publishing Ltd](#) A pragmatic guide for developing your own games with Python About This Book Strengthen your fundamentals of game programming with Python language Seven hands-on games to create 2D and 3D games rapidly from scratch Illustrative guide to explore the different GUI libraries for building your games Who This Book Is For If you have ever wanted to create casual games in Python and you would like to explore various GUI technologies that this language offers, this is the book for you. This title is intended for beginners to Python with little or no knowledge of game development, and it covers step by step how to build seven different games, from the well-known Space Invaders to a classical 3D platformer. What You Will Learn Take advantage of Python's clean syntax to build games quickly Discover distinct frameworks for developing graphical applications Implement non-player characters (NPCs) with autonomous and seemingly intelligent behaviors Design and code some popular games like Pong and tower defense Compose maps and levels for your sprite-based games in an easy manner Modularize and apply object-oriented principles during the design of your games Exploit libraries like Chimpunk2D, cocos2d, and Tkinter Create natural user interfaces (NUIs), using a camera and computer vision algorithms to interpret the player's real-world actions In Detail With a growing interest in learning to program, game

development is an appealing topic for getting started with coding. From geometry to basic Artificial Intelligence algorithms, there are plenty of concepts that can be applied in almost every game. Python is a widely used general-purpose, high-level programming language. It provides constructs intended to enable clear programs on both a small and large scale. It is the third most popular language whose grammatical syntax is not predominantly based on C. Python is also very easy to code and is also highly flexible, which is exactly what is required for game development. The user-friendliness of this language allows beginners to code games without too much effort or training. Python also works with very little code and in most cases uses the “use cases” approach, reserving lengthy explicit coding for outliers and exceptions, making game development an achievable feat. Python Game Programming by Example enables readers to develop cool and popular games in Python without having in-depth programming knowledge of Python. The book includes seven hands-on projects developed with several well-known Python packages, as well as a comprehensive explanation about the theory and design of each game. It will teach readers about the techniques of game design and coding of some popular games like Pong and tower defense. Thereafter, it will allow readers to add levels of complexities to make the games more fun and realistic using 3D. At the end of the book, you will have added several GUI libraries like Chimpunk2D, cocos2d, and Tkinter in your tool belt, as well as a handful of recipes and algorithms for developing games with Python. Style and approach This book is an example-based guide that will teach you to build games using Python. This book follows a step-by-step approach as it is aimed at beginners who would like to get started with basic game development. By the end of this book you will be competent game developers with good knowledge of programming in Python. Python Programming for Arduino [Packt Publishing Ltd](#) This is the book for you if you are a student, hobbyist, developer, or designer with little or no programming and hardware prototyping experience, and you want to develop IoT applications. If you are a software developer or a hardware designer and want to create connected devices applications, then this book will help you get started. Impractical Python Projects Playful Programming Activities to Make You Smarter [No Starch Press](#) Impractical Python Projects is a collection of fun and educational projects designed to entertain programmers while enhancing their Python skills. It picks up where the complete beginner books leave off, expanding on existing concepts and introducing new tools that you'll use every day. And to keep things interesting, each project includes a zany twist featuring historical incidents, pop culture references, and literary allusions. You'll flex your problem-solving skills and employ Python's many useful libraries to do things like: - Help James Bond crack a high-tech safe with a hill-climbing algorithm - Write haiku poems using Markov Chain Analysis - Use genetic algorithms to breed a race of gigantic rats - Crack the world's most successful military cipher using cryptanalysis - Derive the anagram, "I am Lord Voldemort" using linguistical sieves - Plan your

parents' secure retirement with Monte Carlo simulation - Save the sorceress Zatanna from a stabby death using palindromes - Model the Milky Way and calculate our odds of detecting alien civilizations - Help the world's smartest woman win the Monty Hall problem argument - Reveal Jupiter's Great Red Spot using optical stacking - Save the head of Mary, Queen of Scots with steganography - Foil corporate security with invisible electronic ink Simulate volcanoes, map Mars, and more, all while gaining valuable experience using free modules like Tkinter, matplotlib, Cprofile, Pylint, Pygame, Pillow, and Python-Docx. Whether you're looking to pick up some new Python skills or just need a pick-me-up, you'll find endless educational, geeky fun with Impractical Python Projects. Beginning STM32 Developing with FreeRTOS, libopencm3 and GCC [Apress](#) Using FreeRTOS and libopencm3 instead of the Arduino software environment, this book will help you develop multi-tasking applications that go beyond Arduino norms. In addition to the usual peripherals found in the typical Arduino device, the STM32 device includes a USB controller, RTC (Real Time Clock), DMA (Direct Memory Access controller), CAN bus and more. Each chapter contains clear explanations of the STM32 hardware capabilities to help get you started with the device, including GPIO and several other ST Microelectronics peripherals like USB and CAN bus controller. You'll learn how to download and set up the libopencm3 + FreeRTOS development environment, using GCC. With everything set up, you'll leverage FreeRTOS to create tasks, queues, and mutexes. You'll also learn to work with the I2C bus to add GPIO using the PCF8574 chip. And how to create PWM output for RC control using hardware timers. You'll be introduced to new concepts that are necessary to master the STM32, such as how to extend code with GCC overlays using an external Winbond W25Q32 flash chip. Your knowledge is tested at the end of each chapter with exercises. Upon completing this book, you'll be ready to work with any of the devices in the STM32 family. Beginning STM32 provides the professional, student, or hobbyist a way to learn about ARM without costing an arm! What You'll Learn Initialize and use the libopencm3 drivers and handle interrupts Use DMA to drive a SPI based OLED displaying an analog meter Read PWM from an RC control using hardware timers Who This Book Is For Experienced embedded engineers, students, hobbyists and makers wishing to explore the ARM architecture, going beyond Arduino limits. Hands-On GUI Application Development in Go Build responsive, cross-platform, graphical applications with the Go programming language [Packt Publishing Ltd](#) Discover Golang's GUI libraries such as Go-GTK (GIMP Toolkit) and Go-Qt and build beautiful, performant, and responsive graphical applications Key FeaturesConceptualize and build state-of-art GUI applications with Golang (Go)Tackle the complexity of varying GUI application sizes with a structured and scalable approachGet hands-on experience of GUI development with Shiny, and labs/ui, Fyne, and WalkBook Description Go is often compared to C++ when it comes to low-level programming and implementations that require faster processing, such as Graphical User Interfaces (GUIs). In fact, many claim that Go is

superior to C++ in terms of its concurrency and ease of use. Most graphical application toolkits, though, are still written using C or C++, and so they don't enjoy the benefits of using a modern programming language such as Go. This guide to programming GUIs with Go 1.11 explores the various toolkits available, including UI, Walk, Shiny, and Fyne. The book compares the vision behind each project to help you pick the right approach for your project. Each framework is described in detail, outlining how you can build performant applications that users will love. To aid you further in creating applications using these emerging technologies, you'll be able to easily refer to code samples and screenshots featured in the book. In addition to toolkit-specific discussions, you'll cover more complex topics, such as how to structure growing graphical applications, and how cross-platform applications can integrate with each desktop operating system to create a seamless user experience. By delving into techniques and best practices for organizing and scaling Go-based graphical applications, you'll also glimpse Go's impressive concurrency system. In the concluding chapters, you'll discover how to distribute to the main desktop marketplaces and distribution channels. By the end of this book, you'll be a confident GUI developer who can use the Go language to boost the performance of your applications. What you will learn

Understand the benefits and complexities of building native graphical applications
Gain insights into how Go makes cross-platform graphical application development simple
Build platform-native GUI applications using andlabs/ui
Develop graphical Windows applications using Walk
Create multiplatform GUI applications using Shiny, Nuklear, and Fyne
Use Go wrappers for GTK and Qt for GUI application development
Streamline your requirements to pick the correct toolkit strategy

Who this book is for
This book is designed for Go developers who are interested in building native graphical applications for desktop computers and beyond. Some knowledge of building applications using Go is useful, but not essential. Experience in developing GUIs is not required as the book explores the benefits and challenges they pose. This book will also be beneficial for GUI application developers who are interested in trying Go.

The Pragmatic Programmer From Journeyman to Master [Addison-Wesley Professional](#)

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. Text Analytics with Python A Practical Real-World Approach to Gaining Actionable Insights from your Data [Apress](#) Derive useful insights from your data using Python. You will learn both basic and advanced concepts, including text and language syntax, structure, and semantics. You will focus on algorithms and techniques, such as text classification,

clustering, topic modeling, and text summarization. Text Analytics with Python teaches you the techniques related to natural language processing and text analytics, and you will gain the skills to know which technique is best suited to solve a particular problem. You will look at each technique and algorithm with both a bird's eye view to understand how it can be used as well as with a microscopic view to understand the mathematical concepts and to implement them to solve your own problems. What You Will Learn: Understand the major concepts and techniques of natural language processing (NLP) and text analytics, including syntax and structure Build a text classification system to categorize news articles, analyze app or game reviews using topic modeling and text summarization, and cluster popular movie synopses and analyze the sentiment of movie reviews Implement Python and popular open source libraries in NLP and text analytics, such as the natural language toolkit (nltk), gensim, scikit-learn, spaCy and Pattern Who This Book Is For : IT professionals, analysts, developers, linguistic experts, data scientists, and anyone with a keen interest in linguistics, analytics, and generating insights from textual data Python for Teenagers Learn to Program like a Superhero! [Apress](#) Discover everything you need to know about Python to turn your passion of programming into a job you'll love. Fueled by fun and practical examples, this book gives high schoolers who want learn an easy programming language ideas for how to leverage them in the workforce. Start with the basics and before you know it, you'll be building your own web sites, doing white-hat hacking, finding code bugs and errors, and creating games, including using Python to roll characters for RPGs. Every chapter is relaxed and informal, like learning with a cool teacher all the time. Computers, phones and the web are your playground, and you'll be ready to join the party with your own content. Going beyond posts and uploads means learning to program, and Python is a great choice to get started. It's quick to learn, it's flexible, and if you want, it may get you a Python job that pays more than minimum wage when you're out of school. Python for Teenagers is the most fun you'll have while learning. What You'll Learn Review programming basics - you gotta start somewhere Code applications that follow directions and make decisions Understand Classes and objects - when a program is a child Make games with graphics and animation Who This Book Is For High schoolers who want learn an easy programming language. Modern Tkinter for Busy Python Developers Quickly Learn to Create Great Looking User Interfaces for Windows, Mac and Linux Using Python's Standard GUI Toolkit Third Edition: thoroughly revised and expanded! Over 20% new material. Updated for Python 3.9. Quickly learn the right way to build attractive and modern graphical user interfaces with Python and Tkinter. You know some Python. You want to create a user interface for your application. You don't want to waste time messing around with things you don't need. Enter Tkinter. It's built right into Python. Everything you need is included in the standard Python distributions. No extra downloads. Your Python and Tkinter scripts will work on Windows, Mac and Linux. Tkinter has a simple, clean,

Pythonic API and takes care of much of the housekeeping needed in GUI programming. You can focus on what's unique in your application. **One HUGE Problem.** Tkinter has been around for a very long time. There's a lot of documentation, much of it created years ago. Nearly everything you'd find in that documentation still works today. But it's all wrong. Tkinter has a reputation for ugly and outdated user interfaces that don't fit in with modern systems. And if you follow the old documentation, that's exactly what you'll get. Because Tkinter has taken a quantum leap forward since all that documentation was written. There are new and better ways to build your user interface. Your program needs to be written differently to take advantage of that. Modern Tkinter shows you the right way to do it. You'll learn all the modern best practices. You'll build your user interface the right way the first time, without having to learn anything extra or irrelevant. It starts at the beginning, shows you what you need to know, and covers all the essential elements of building your modern user interface. This includes: all the standard GUI widgets attractively laying out your user interface managing menus, windows, and standard dialogs organizing more complex user interfaces Tkinter's powerhouse widgets: canvas and text customizing the look of your user interface making it all work on Mac, Windows, and Linux You may have been using older documentation, or are trying to update a Tkinter program written years ago. If so, you'll find warnings of what to avoid using, and how to replace it with a modern solution. There's even a full case study of modernizing the user interface of a seriously out-of-date Tkinter application you may be familiar with. **Who this book is for** This book is for everyday Python programmers looking to quickly create desktop user interfaces. You may be new to Tkinter, or want to bring your knowledge up to date. You don't need to be an expert on OOP, MVC architecture, multithreading or any other advanced topics. In fact, you're not going to see any of those things in this book. This book uses Python 3.9, but everything you learn will apply (with small tweaks) to any Python 3.x version. It won't help you if you're using Python 2.x. Let veteran software developer Mark Roseman show you the right way to build user interfaces with Python and Tkinter. He's been using and Tk (the technology behind Tkinter) since its early days and has shipped dozens of open source tools and commercial applications based on it. He's also the author of the multi-lingual TkDocs website, the de facto reference for building modern Tk user interfaces. This book brings together Python-specific information from that site and supports its further development. **Cracking Codes with Python An Introduction to Building and Breaking Ciphers** [No Starch Press](#) Learn how to program in Python while making and breaking ciphers—algorithms used to create and send secret messages! After a crash course in Python programming basics, you'll learn to make, test, and hack programs that encrypt text with classical ciphers like the transposition cipher and Vigenère cipher. You'll begin with simple programs for the reverse and Caesar ciphers and then work your way up to public key cryptography, the type of encryption used to secure today's online transactions, including digital

signatures, email, and Bitcoin. Each program includes the full code and a line-by-line explanation of how things work. By the end of the book, you'll have learned how to code in Python and you'll have the clever programs to prove it! You'll also learn how to:

- Combine loops, variables, and flow control statements into real working programs
- Use dictionary files to instantly detect whether decrypted messages are valid English or gibberish
- Create test programs to make sure that your code encrypts and decrypts correctly
- Code (and hack!) a working example of the affine cipher, which uses modular arithmetic to encrypt a message
- Break ciphers with techniques such as brute-force and frequency analysis

There's no better way to learn to code than to play with real programs. **Cracking Codes with Python makes the learning fun!** **Python GUI Programming Cookbook** Develop functional and responsive user interfaces with **tkinter and PyQt5, 3rd Edition** [Packt Publishing Ltd](#) Over 90 recipes to help you develop widgets, forms, layouts, charts, and much more using the latest features of Python 3

Key Features Use object-oriented programming to develop impressive GUIs in Python Create interesting charts to visually represent data using Matplotlib Develop GUIs with the latest versions of tkinter, PyQt5, and wxPython frameworks

Book Description Python is a multi-domain, interpreted programming language that is easy to learn and implement. With its wide support for frameworks to develop GUIs, you can build interactive and beautiful GUI-based applications easily using Python. This third edition of **Python GUI Programming Cookbook** follows a task-based approach to help you create effective GUIs with the smallest amount of code. Every recipe in this book builds upon the last to create an entire, real-life GUI application. These recipes also help you solve problems that you might encounter while developing GUIs. This book mainly focuses on using Python's built-in tkinter GUI framework. You'll learn how to create GUIs in Python using simple programming styles and object-oriented programming (OOP). As you add more widgets and expand your GUI, you will learn how to connect to networks, databases, and graphical libraries that greatly enhance the functionality of your GUI. You'll also learn how to use threading to ensure that your GUI doesn't become unresponsive. Toward the end, you'll learn about the versatile PyQt GUI framework, which comes along with its own visual editor that allows you to design GUIs using drag and drop features. By the end of the book, you'll be an expert in designing Python GUIs and be able to develop a variety of GUI applications with ease. What you will learn

- Create amazing GUIs with Python's built-in tkinter module
- Customize GUIs using layout managers to arrange GUI widgets
- Advance from the typical waterfall coding style to an OOP style using Python
- Develop beautiful charts using the free Matplotlib Python module
- Use threading in a networked environment to make GUIs responsive
- Discover ways to connect GUIs to a MySQL database
- Understand how unit tests can be created and internationalize GUI
- Delve into the world of GUI creation using PyQt5

Who this book is for If you're a programmer or developer looking to enhance your Python skills by writing powerful GUI applications, this book is for you.

Familiarity with the Python programming language is necessary to get the most out of the book. Beginning Software Engineering [John Wiley & Sons](#) **A complete introduction to building robust and reliable software** **Beginning Software Engineering demystifies the software engineering methodologies and techniques that professional developers use to design and build robust, efficient, and consistently reliable software. Free of jargon and assuming no previous programming, development, or management experience, this accessible guide explains important concepts and techniques that can be applied to any programming language. Each chapter ends with exercises that let you test your understanding and help you elaborate on the chapter's main concepts. Everything you need to understand waterfall, Sashimi, agile, RAD, Scrum, Kanban, Extreme Programming, and many other development models is inside! Describes in plain English what software engineering is Explains the roles and responsibilities of team members working on a software engineering project Outlines key phases that any software engineering effort must handle to produce applications that are powerful and dependable Details the most popular software development methodologies and explains the different ways they handle critical development tasks Incorporates exercises that expand upon each chapter's main ideas Includes an extensive glossary of software engineering terms** **Python 2.1 Bible** [Wiley](#) **The Python 2.1 Bible provides the only complete Python language reference on the market and includes all the information and software that developers need to use Python as a rapid application development tool. The Python 2.1 Bible fills a critical void in the Python reference market. Although it includes a complete Python language reference section, it is still geared towards those of you who already have some programming experience. This book explains each piece of technology in depth and shows through clear examples why each feature is useful. This is the manual you've been waiting for -- the one that covers all major Python components without glossing over how the various pieces fit together.** **Qt5 Python GUI Programming Cookbook** **Building responsive and powerful cross-platform applications with PyQt** [Packt Publishing Ltd](#) **Over 60 recipes to help you design interactive, smart, and cross-platform GUI applications** **Key Features** **Get succinct QT solutions to pressing GUI programming problems in Python** **Learn how to effectively implement reactive programming** **Build customized applications that are robust and reliable** **Book Description** **PyQt is one of the best cross-platform interface toolkits currently available; it's stable, mature, and completely native. If you want control over all aspects of UI elements, PyQt is what you need. This book will guide you through every concept necessary to create fully functional GUI applications using PyQt, with only a few lines of code. As you expand your GUI using more widgets, you will cover networks, databases, and graphical libraries that greatly enhance its functionality. Next, the book guides you in using Qt Designer to design user interfaces and implementing and testing dialogs, events, the clipboard, and drag and drop functionality to customize your GUI. You will learn a variety of topics, such as**

look and feel customization, GUI animation, graphics rendering, implementing Google Maps, and more. Lastly, the book takes you through how Qt5 can help you to create cross-platform apps that are compatible with Android and iOS. You will be able to develop functional and appealing software using PyQt through interesting and fun recipes that will expand your knowledge of GUIs. What you will learn: Use basic Qt components, such as a radio button, combo box, and sliders; Use QSpinBox and sliders to handle different signals generated on mouse clicks; Work with different Qt layouts to meet user interface requirements; Create custom widgets and set up customizations in your GUI; Perform asynchronous I/O operations and thread handling in the Python GUI; Employ network concepts, internet browsing, and Google Maps in UI; Use graphics rendering and implement animation in your GUI; Make your GUI application compatible with Android and iOS devices.

Who this book is for: If you're an intermediate Python programmer wishing to enhance your coding skills by writing powerful GUIs in Python using PyQt, this is the book for you.

Mastering JavaFX 10: Build advanced and visually stunning Java applications. Packt Publishing Ltd. JavaFX 10 is used to create media-rich client applications. If you are a Java developer and want to create graphical applications and skill up to become a pro at Java GUI programming, then this is the right choice for you. You will be guided through the different components of the JavaFX application, to master and combine them.

Python Programming for the Absolute Beginner: CD-ROM Science and Development of Muscle Hypertrophy. Human Kinetics. Muscle hypertrophy—defined as an increase in muscular size—is one of the primary outcomes of resistance training. Science and Development of Muscle Hypertrophy is a comprehensive compilation of science-based principles to help professionals develop muscle hypertrophy in athletes and clients. With more than 825 references and applied guidelines throughout, no other resource offers a comparable quantity of content solely focused on muscle hypertrophy. Readers will find up-to-date content so they fully understand the science of muscle hypertrophy and its application to designing training programs. Written by Brad Schoenfeld, PhD, a leading authority on muscle hypertrophy, this text provides strength and conditioning professionals, personal trainers, sport scientists, researchers, and exercise science instructors with a definitive resource for information regarding muscle hypertrophy—the mechanism of its development, how the body structurally and hormonally changes when exposed to stress, ways to most effectively design training programs, and current nutrition guidelines for eliciting hypertrophic changes. The full-color book offers several features to make the content accessible to readers:

- Research Findings sidebars highlight the aspects of muscle hypertrophy currently being examined to encourage readers to re-evaluate their knowledge and ensure their training practices are up to date.
- Practical Applications sidebars outline how to apply the research conclusions for maximal hypertrophic development.
- Comprehensive subject and author indexes optimize the book's utility as a reference tool.
- An image bank containing

most of the art, photos, and tables from the text allows instructors and presenters to easily teach the material outlined in the book. Although muscle hypertrophy can be attained through a range of training programs, this text allows readers to understand and apply the specific responses and mechanisms that promote optimal muscle hypertrophy in their athletes and clients. It explores how genetic background, age, sex, and other factors have been shown to mediate the hypertrophic response to exercise, affecting both the rate and the total gain in lean muscle mass. Sample programs in the text show how to design a three- or four-day-per-week undulating periodized program and a modified linear periodized program for maximizing muscular development. Science and Development of Muscle Hypertrophy is an invaluable resource for strength and conditioning professionals seeking to maximize hypertrophic gains and those searching for the most comprehensive, authoritative, and current research in the field. Building Android Apps in Python Using Kivy with Android Studio With Pyjnius, Plyer, and Buildozer [Apress](#) Start building Python-based Android applications using Kivy with Android Studio. Through in-depth examples, this book teaches you everything you need to create your first Android application in Python and publish on Google Play. Building Android Apps in Python Using Kivy with Android Studio takes you through the basics of Kivy by discussing its application structure, widgets, and event handling. The KV language is then introduced for separating the logic and GUI by adding widgets within a KV file. You will then learn how to utilize Android camera using Kivy, build the HTTP server using Flask, and create and manage multiple screens to help you design your own applications. Through detailed step-by-step instructions, you will create your first multi-level cross-platform game that includes animation and sound effects. Following this, the process of converting the Kivy application into an Android application using Buildozer and Python-4-Android is covered in detail. You will then learn how to edit the generated Android Studio project into Android Studio by adding extensions to the original application. The widgets added in Kivy could be handled within Android Studio. Moreover, Android views could be added to enrich the Kivy application. The resulting Android application created with Kivy can be hosted on Google Play to download and install as a regular Android application. At the end, this book will give you the basic knowledge of Kivy needed to build cross-platform Android applications, produce an Android Studio project, and understand how it all works in detail. What You Will Learn Build cross-platform applications from scratch using Kivy in detail Create a cross-platform interactive multi-level game from the ground up Examine the pipeline of building an Android app from the Python Kivy app Understand the structure of the Android Studio project produced by Kivy Recognize how to extend the application within Android Studio by adding more Android views to the application main activity. Who This Book Is For Python developers with no previous experience in Kivy who are looking to create their first Android application completely in Python. Software Architecture with Python [Packt Publishing Ltd](#) Architect and

design highly scalable, robust, clean, and highly performant applications in Python About This Book Identify design issues and make the necessary adjustments to achieve improved performance Understand practical architectural quality attributes from the perspective of a practicing engineer and architect using Python Gain knowledge of architectural principles and how they can be used to provide accountability and rationale for architectural decisions Who This Book Is For This book is for experienced Python developers who are aspiring to become the architects of enterprise-grade applications or software architects who would like to leverage Python to create effective blueprints of applications. What You Will Learn Build programs with the right architectural attributes Use Enterprise Architectural Patterns to solve scalable problems on the Web Understand design patterns from a Python perspective Optimize the performance testing tools in Python Deploy code in remote environments or on the Cloud using Python Secure architecture applications in Python In Detail This book starts off by explaining how Python fits into an application architecture. As you move along, you will understand the architecturally significant demands and how to determine them. Later, you'll get a complete understanding of the different architectural quality requirements that help an architect to build a product that satisfies business needs, such as maintainability/reusability, testability, scalability, performance, usability, and security. You will use various techniques such as incorporating DevOps, Continuous Integration, and more to make your application robust. You will understand when and when not to use object orientation in your applications. You will be able to think of the future and design applications that can scale proportionally to the growing business. The focus is on building the business logic based on the business process documentation and which frameworks are to be used when. We also cover some important patterns that are to be taken into account while solving design problems as well as those in relatively new domains such as the Cloud. This book will help you understand the ins and outs of Python so that you can make those critical design decisions that not just live up to but also surpass the expectations of your clients. Style and approach Filled with examples and use cases, this guide takes a no-nonsense approach to help you with everything it takes to become a successful software architect. Teach Your Kids to Code A Parent-Friendly Guide to Python Programming [No Starch Press](#) Teach Your Kids to Code is a parent's and teacher's guide to teaching kids basic programming and problem solving using Python, the powerful language used in college courses and by tech companies like Google and IBM. Step-by-step explanations will have kids learning computational thinking right away, while visual and game-oriented examples hold their attention. Friendly introductions to fundamental programming concepts such as variables, loops, and functions will help even the youngest programmers build the skills they need to make their own cool games and applications. Whether you've been coding for years or have never programmed anything at all, Teach Your Kids to Code will help you show your young

programmer how to: -Explore geometry by drawing colorful shapes with Turtle graphics -Write programs to encode and decode messages, play Rock-Paper-Scissors, and calculate how tall someone is in Ping-Pong balls -Create fun, playable games like War, Yahtzee, and Pong -Add interactivity, animation, and sound to their apps Teach Your Kids to Code is the perfect companion to any introductory programming class or after-school meet-up, or simply your educational efforts at home. Spend some fun, productive afternoons at the computer with your kids—you can all learn something! **Machine Learning For Dummies** [John Wiley & Sons](#) One of Mark Cuban's top reads for better understanding A.I. (inc.com, 2021) Your comprehensive entry-level guide to machine learning While machine learning expertise doesn't quite mean you can create your own Turing Test-proof android—as in the movie Ex Machina—it is a form of artificial intelligence and one of the most exciting technological means of identifying opportunities and solving problems fast and on a large scale. Anyone who masters the principles of machine learning is mastering a big part of our tech future and opening up incredible new directions in careers that include fraud detection, optimizing search results, serving real-time ads, credit-scoring, building accurate and sophisticated pricing models—and way, way more. Unlike most machine learning books, the fully updated 2nd Edition of Machine Learning For Dummies doesn't assume you have years of experience using programming languages such as Python (R source is also included in a downloadable form with comments and explanations), but lets you in on the ground floor, covering the entry-level materials that will get you up and running building models you need to perform practical tasks. It takes a look at the underlying—and fascinating—math principles that power machine learning but also shows that you don't need to be a math whiz to build fun new tools and apply them to your work and study. Understand the history of AI and machine learning **Work with Python 3.8 and TensorFlow 2.x (and R as a download)** Build and test your own models Use the latest datasets, rather than the worn out data found in other books Apply machine learning to real problems Whether you want to learn for college or to enhance your business or career performance, this friendly beginner's guide is your best introduction to machine learning, allowing you to become quickly confident using this amazing and fast-developing technology that's impacting lives for the better all over the world. **Clean Code in Python Refactor your legacy code base** [Packt Publishing Ltd](#) Getting the most out of Python to improve your codebase Key Features Save maintenance costs by learning to fix your legacy codebase Learn the principles and techniques of refactoring Apply microservices to your legacy systems by implementing practical techniques **Book Description** Python is currently used in many different areas such as software construction, systems administration, and data processing. In all of these areas, experienced professionals can find examples of inefficiency, problems, and other perils, as a result of bad code. After reading this book, readers will understand these problems, and more importantly, how to correct them. The book

begins by describing the basic elements of writing clean code and how it plays an important role in Python programming. You will learn about writing efficient and readable code using the Python standard library and best practices for software design. You will learn to implement the SOLID principles in Python and use decorators to improve your code. The book delves more deeply into object oriented programming in Python and shows you how to use objects with descriptors and generators. It will also show you the design principles of software testing and how to resolve software problems by implementing design patterns in your code. In the final chapter we break down a monolithic application to a microservice one, starting from the code as the basis for a solid platform. By the end of the book, you will be proficient in applying industry approved coding practices to design clean, sustainable and readable Python code. What you will learn Set up tools to effectively work in a development environment Explore how the magic methods of Python can help us write better code Examine the traits of Python to create advanced object-oriented design Understand removal of duplicated code using decorators and descriptors Effectively refactor code with the help of unit tests Learn to implement the SOLID principles in Python Who this book is for This book will appeal to team leads, software architects and senior software engineers who would like to work on their legacy systems to save cost and improve efficiency. A strong understanding of Programming is assumed. Hello World! Computer Programming for Kids and Other Beginners [Manning Publications Company](#) Presents a guide for beginners on the fundamentals of computer programming using the Python language. Learning Salesforce Lightning Application Development Build and test Lightning Components for Salesforce Lightning Experience using Salesforce DX [Packt Publishing Ltd](#) Build, design, and style beautiful and informative applications on the Salesforce Lightning platform Key Features Build and Test Lightning Components that enhance application usability and adaptability Apply Security Best Practices to your Custom Lightning Components Design Lightning Components for Salesforce UIs such as Lightning Pages, Salesforce 1 Application, Communities, and more. Book Description Built on the Salesforce App Cloud, the new Salesforce Lightning Experience combines three major components: Lightning Design System, Lightning App Builder, and Lightning Components, to provide an enhanced user experience. This book will enable you to quickly create modern, enterprise apps with Lightning Component Framework. You will start by building simple Lightning Components and understanding the Lightning Components architecture. The chapters cover the basics of Lightning Component Framework semantics and syntax, the security features provided by Locker Service, and use of third-party libraries inside Lightning Components. The later chapters focus on debugging, performance tuning, testing using Lightning Testing Services, and how to publish Lightning Components on Salesforce AppExchange. What you will learn Understand Lightning Components architecture Learn Locker security best practices Debug and Improve performance of your Lightning

Components Use third-party libraries along with Lightning Component Framework Learn how to publish Lightning Components on AppExchange Use Lightning Out to take your Lightning Components outside the Salesforce platform Who this book is for This book is for Salesforce developers or developers from other platforms who are familiar with HTML, CSS, and JavaScript and want to build and test Salesforce Lightning components. No knowledge of Salesforce Lightning is required. The Official Raspberry Pi Beginner's Guide How to Use Your New Computer Introduction to Python Programming and Developing GUI Applications with PyQt [Muska/Lipman](#) Covers the basics of Python programming, file handling, and GUI application development in PyQt. A Primer for Computational Biology A Primer for Computational Biology aims to provide life scientists and students the skills necessary for research in a data-rich world. The text covers accessing and using remote servers via the command-line, writing programs and pipelines for data analysis, and provides useful vocabulary for interdisciplinary work. The book is broken into three parts: Introduction to Unix/Linux: The command-line is the "natural environment" of scientific computing, and this part covers a wide range of topics, including logging in, working with files and directories, installing programs and writing scripts, and the powerful "pipe" operator for file and data manipulation. Programming in Python: Python is both a premier language for learning and a common choice in scientific software development. This part covers the basic concepts in programming (data types, if-statements and loops, functions) via examples of DNA-sequence analysis. This part also covers more complex subjects in software development such as objects and classes, modules, and APIs. Programming in R: The R language specializes in statistical data analysis, and is also quite useful for visualizing large datasets. This third part covers the basics of R as a programming language (data types, if-statements, functions, loops and when to use them) as well as techniques for large-scale, multi-test analyses. Other topics include S3 classes and data visualization with ggplot2. Hardcore Programming for Mechanical Engineers Build Engineering Applications from Scratch [No Starch Press](#) Hardcore Programming for Mechanical Engineers is for intermediate programmers who want to write good applications that solve tough engineering problems - from scratch. This book will teach you how to solve engineering problems with Python. The "hardcore" approach means that you will learn to get the correct results by coding everything from scratch. Forget relying on third-party software - there are no shortcuts on the path to proficiency. Instead, using familiar concepts from linear algebra, geometry and physics, you'll write your own libraries, draw your own primitives, and build your own applications. Author Angel Sola covers core programming techniques mechanical engineers need to know, with a focus on high-quality code and automated unit testing for error-free implementations. After basic primers on Python and using the command line, you'll quickly develop a geometry toolbox, filling it with lines and shapes for diagramming problems. As your understanding grows chapter-by-chapter, you'll create vector graphics and animations

for dynamic simulations; you'll code algorithms that can do complex numerical computations; and you'll put all of this knowledge together to build a complete structural analysis application that solves a 2D truss problem - similar to the software projects conducted by real-world mechanical engineers. You'll learn:

- How to use geometric primitives, like points and polygons, and implement matrices
- Best practices for clean code, including unit testing, encapsulation, and expressive names
- Processes for drawing images to the screen and creating animations inside Tkinter's Canvas widget
- How to write programs that read from a file, parse the data, and produce vector images
- Numerical methods for solving large systems of linear equations, like the Cholesky decomposition algorithm

New Technologies, Development and Application II [Springer](#) This book features papers focusing on the implementation of new and future technologies, which were presented at the International Conference on New Technologies, Development and Application, held at the Academy of Science and Arts of Bosnia and Herzegovina in Sarajevo on 27th-29th June 2019. It covers a wide range of future technologies and technical disciplines, including complex systems such as Industry 4.0; robotics; mechatronics systems; automation; manufacturing; cyber-physical and autonomous systems; sensors; networks; control, energy, automotive and biological systems; vehicular networking and connected vehicles; effectiveness and logistics systems, smart grids, as well as nonlinear, power, social and economic systems. We are currently experiencing the Fourth Industrial Revolution "Industry 4.0", and its implementation will improve many aspects of human life in all segments, and lead to changes in business paradigms and production models. Further, new business methods are emerging, transforming production systems, transport, delivery, and consumption, which need to be monitored and implemented by every company involved in the global market.