

## Subclassing And Hooking With Visual Basic

Malware analysis is big business, and attacks can cost a company dearly. When malware breaches your defenses, you need to act quickly to cure current infections and prevent future ones from occurring. For those who want to stay ahead of the latest malware, Practical Malware Analysis will teach you the tools and techniques used by professional analysts. With this book as your guide, you'll be able to safely analyze, debug, and disassemble any malicious software that comes your way. You'll learn how to: –Set up a safe virtual environment to analyze malware –Quickly extract network signatures and host-based indicators –Use key analysis tools like IDA Pro, OllyDbg, and WinDbg –Overcome malware tricks like obfuscation, anti-disassembly, anti-debugging, and anti-virtual machine techniques –Use your newfound knowledge of Windows internals for malware analysis –Develop a methodology for unpacking malware and get practical experience with five of the most popular packers –Analyze special cases of malware with shellcode, C++, and 64-bit code Hands-on labs throughout the book challenge you to practice and synthesize your skills as you dissect real malware samples, and pages of detailed dissections offer an over-the-shoulder look at how the pros do it. You'll learn how to crack open malware to see how it really works, determine what damage it has done, thoroughly clean your network, and ensure that the malware never comes back. Malware analysis is a cat-and-mouse game with rules that are constantly changing, so make sure you have the fundamentals. Whether you're tasked with securing one network or a thousand networks, or you're making a living as a malware analyst, you'll find what you need to succeed in Practical Malware Analysis. Discusses the diverse features and functions of the Component Object Model (COM) and how to utilize the COM+ capabilities of Visual Basic 6.0 to develop various applications, and explains how to incorporate diverse COM+ services, such as transaction support, security, and asynchronous operations into those applications. Original.

(Intermeditate/Advanced)

Provides information on Web site development using ASP.NET 2.0.

The ultimate beginner's guide to programming in Visual Basic 2012 Visual Basic, used to write Windows applications and web apps with ASP.NET, is an essential language for beginning programmers. Using the time-tested Wrox approach, this guide provides a step-by-step format that gets beginners up and running quickly and confidently. Essential topics covered include writing Windows applications, working with dialog boxes and menus, object oriented programming techniques, programming for graphics, using Visual Basic with ASP.NET for web apps, and dealing with data access and SQL Server. Visual Basic is a popular first language for beginning programmers; this Wrox beginner's guide covers all aspects of the newest version Uses a basic, step-by-step approach to help beginners learn quickly and easily Covers essential topics including flow control, data structure, writing Windows applications, error handling and debugging, objects and object oriented techniques, and class libraries Explains Windows Forms, graphics programming, accessing databases, web programming using Visual Basic with ASP.NET, data access, SQL Server, ADO.NET, and XML Beginning Visual Basic 2012 is a must-have for programming newcomers who want to get a solid footing in one of the most important programming languages.

Topics in this comprehensive guide include: why should users move to Visual Basic.NET; major VB.NET changes; building classes and assemblies with VB.NET; building Windows services with VB.NET; and upgrading VB6 Projects to VB.NET .

This is a practical tutorial to writing Visual Basic (VB6 and VB.NET) programs using some of the most common design patterns. This book also provides a convenient way for VB6 programmers to migrate to VB.NET and use its more powerful object-oriented features. Organized as a series of short chapters that each describe a design pattern, Visual Basic Design Patterns provides one or more complete working visual examples of programs using that pattern, along with UML diagrams illustrating how the classes interact. Each example is a visual program that students can run and study on the companion CD making the pattern as concrete as possible.

The Windows shell is the user interface for Windows 9x and Windows NT 4.0, allowing execution of common tasks such as accessing the file system, launching programs and changing system-wide settings. However, it's not just about user interaction : the shell exposes programming hooks that you can use from your own applications. This book shows you how to work with and extend the functionality of the shell, from tinkering with the Shell API to writing COM objects that get loaded into the address space. Within these pages is a compendium of shell programming techniques. You'll learn how to push the Windows shell to perform complex actions, and customise it using C++ programs. There's coverage of the Shell API, the Windows Scripting Host, and shell and namespace extensions that use the shell's object model. Who is this book for ? This title is for programmers who are experienced in Windows development and familiar with using COM and ATL to create components in Visual C++ . The book will show you how to use COM and the Shell API to integrate your application with the shell. It is not about making cosmetic changes to the desktop.

Subclassing and Hooking with Visual Basic"O'Reilly Media, Inc."

Managed Code Rootkits is the first book to cover application-level rootkits and other types of malware inside the application VM, which runs a platform-independent programming environment for processes. The book, divided into four parts, points out high-level attacks, which are developed in intermediate language. The initial part of the book offers an overview of managed code rootkits. It explores environment models of managed code and the relationship of managed code to rootkits by studying how they use application VMs. It also discusses attackers of managed code rootkits and various attack scenarios. The second part of the book covers the development of managed code rootkits, starting with the tools used in producing managed code rootkits through their deployment. The next part focuses on countermeasures that can possibly be used against managed code rootkits, including technical solutions, prevention, detection, and response tactics. The book concludes by presenting techniques that are somehow similar to managed code rootkits, which can be used in solving problems. Named a 2011 Best Hacking and Pen Testing Book by

InfoSec Reviews Introduces the reader briefly to managed code environments and rootkits in general Completely details a new type of rootkit hiding in the application level and demonstrates how a hacker can change language runtime implementation

Focuses on managed code including Java, .NET, Android Dalvik and reviews malware development scenarios

Users can dramatically improve the design, performance, and manageability of object-oriented code without altering its interfaces or behavior. "Refactoring" shows users exactly how to spot the best opportunities for refactoring and exactly how to do it, step by step.

Completely updated for C# 3.0 and the .NET 3.5 platform, the new edition of this bestseller offers more than 250 code recipes to common and not-so-common problems that C# programmers face every day. Every recipe in the book has been reconsidered with more than a third of them rewritten to take advantage of new C# 3.0 features. If you prefer solutions you can use today to general C# language instruction, and quick answers to theory, this is your book. C# 3.0 Cookbook offers a new chapter on LINQ (language integrated query), plus two expanded chapters for recipes for extension methods, lambda functions, object initializers, new synchronization primitives and more. The new edition is also complemented by a public wiki, which not only includes all of the C# 2.0 recipes from the previous edition unchanged by the release of C# 3.0, but invites you to suggest better ways to solve those tasks. Here are some of topics covered: LINQ Numeric data types and Enumerations Strings and characters Classes and structures Generics Collections Exception handling Delegates, events, and lambda expressions Filesystem interactions Web site access XML usage (including LINQ to XML, XPath and XSLT) Networking Threading Data Structures & Algorithms Each recipe in the book includes tested code that you can download from oreilly.com and reuse in your own applications, and each one includes a detailed discussion of how and why the underlying technology works. You don't have to be an experienced C# or .NET developer to use C# 3.0 Cookbook. You just have to be someone who wants to solve a problem now, without having to learn all the related theory first.

The "C# Cookbook" offers a definitive collection of solutions and examples for this new programming language. Recipes range from simple tasks to the more complex, and are organized with respect to the types of problems users need to solve as they progress in their experience as a C# programmer.

ASP.NET Core in Action, Second Edition is a comprehensive guide to creating web applications with ASP.NET Core 5.0. Go from basic HTTP concepts to advanced framework customization. Summary Fully updated to ASP.NET 5.0, ASP.NET Core in Action, Second Edition is a hands-on primer to building cross-platform web applications with your C# and .NET skills. Even if you've never worked with ASP.NET you'll start creating productive cross-platform web apps fast. And don't worry about late-breaking changes to ASP.NET Core. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

About the technology Build full-stack web applications that run anywhere. Developers love ASP.NET Core for its libraries and pre-built components that maximize productivity. Version 5.0 offers new features for server-side apps, as well as background services for cross-platform development. About the book ASP.NET Core in Action, Second Edition is a comprehensive guide to creating web applications with ASP.NET Core 5.0. Go from basic HTTP concepts to advanced framework customization. Illustrations and annotated code make learning visual and easy. Master logins, dependency injection, security, and more. This updated edition covers the latest features, including Razor Pages and the new hosting paradigm. What's inside Developing apps for Windows and non-Windows servers Configuring applications Building custom components Logging, testing, and security About the reader For intermediate C# developers. About the author Andrew Lock is a Microsoft MVP who has worked with ASP.NET Core since before its first release. Table of Contents PART 1 - GETTING STARTED WITH ASP.NET CORE 1 Getting started with ASP.NET Core 2 Your first application 3 Handling requests with the middleware pipeline 4 Creating a website with Razor Pages 5 Mapping URLs to Razor Pages using routing 6 The binding model: Retrieving and validating user input 7 Rendering HTML using Razor views 8 Building forms with Tag Helpers 9 Creating a Web API for mobile and client applications using MVC PART 2 - BUILDING COMPLETE APPLICATIONS 10 Service configuration with dependency injection 11 Configuring an ASP.NET Core application 12 Saving data with Entity Framework Core 13 The MVC and Razor Pages filter pipeline 14 Authentication: Adding users to your application with Identity 15 Authorization: Securing your application 16 Publishing and deploying your application PART 3 - EXTENDING YOUR APPLICATIONS 17 Monitoring and troubleshooting errors with logging 18 Improving your application's security 19 Building custom components 20 Building custom MVC and Razor Pages components 21 Calling remote APIs with IHttpConnectionFactory 22 Building background tasks and services 23 Testing your application

Explains how Visual BASIC has been altered to work within the .NET framework and provides information about topics such as syntax, keyword operations, accepted arguments, and undocumented behaviors of VB.NET.

This book presents a set of principles for designing frameworks and practical techniques for adapting them efficiently. It also describes how UML may be used to model frameworks and their applications and proposes a set of extensions to the UML which apply specifically to framework design.

The first edition has been a big hit with serious Visual Basic programmers. In this second edition, they'll find more help for expanding what Visual Basic can do.

Pearce's book is specifically about debugging in the programming language VB.NET for every application type, from Windows Forms to ASP.NET to XML Web services.

Examining the differences between VBScript and JavaScript, this introductory tutorial illustrates how to implement the new ActiveX components using VBScript. Above all, it gives a proficient grounding and understanding of VBScript, allowing readers to create more complex Web applications and documents. The CD-ROM contains some carefully selected development tools including ActiveX Control Pad, HTML Layout Control, and ActiveX Control Lister for HTML.

"Look it up in Petzold" remains the decisive last word in answering questions about Windows development. And in PROGRAMMING WINDOWS, FIFTH EDITION, the esteemed Windows Pioneer Award winner revises his classic text with authoritative coverage of the latest versions of the Windows operating system—once again drilling down to the essential API heart of Win32 programming. Topics include: The basics—input, output, dialog boxes An introduction to Unicode Graphics—drawing, text and fonts, bitmaps and metafiles The kernel and the printer Sound and music Dynamic-link libraries Multitasking and multithreading The Multiple-Document Interface Programming for the Internet and intranets Packed as always with definitive examples, this newest Petzold delivers the ultimate sourcebook and tutorial for Windows

programmers at all levels working with Microsoft Windows 95, Windows 98, or Microsoft Windows NT. No aspiring or experienced developer can afford to be without it. An electronic version of this book is available on the companion CD. For customers who purchase an ebook version of this title, instructions for downloading the CD files can be found in the ebook.

Getting data across platforms and formats is a cornerstone of present-day applications development. ADO: ActiveX Data Objects is both an introduction and a complete reference to ADO (ActiveX Data Objects), Microsoft's universal data access solution. You'll learn how to easily access data in multiple formats--such as email messages, Access databases, Word documents, and SQL databases--even on different platforms, without spending extra time learning every last detail about each format. Author Jason Roff shows by example how to use ADO with your programming language of choice to save programming time, so you can concentrate on the content and quality of your application rather than the nitty-gritty of specific data formats. ADO: ActiveX Data Objects includes: Chapters dedicated to the Connection, Recordset, Field, and Command objects and the Properties collection A complete, detailed reference listing every ADO object, method, property, and event, in convenient alphabetical order Chapters on ADO architecture, data shaping, the ADO Event Model An appendix containing enumeration tables used by ADO objects and collections, listed alphabetically Brief introductions to RDS, ADO.NET, and SQL ADO: ActiveX Data Objects is a versatile one-stop guide to both the theory and practice of programming with ADO through Version 2.6. The thorough reference section and topic-specific chapters will help you find quick answers about the details of objects, collections, methods, and properties of ADO. And the abundance of practical code examples will give you a good grasp of how to use ADO's strong points most effectively.

This book is an in-depth introduction to Erlang, a programming language ideal for any situation where concurrency, fault tolerance, and fast response is essential. Erlang is gaining widespread adoption with the advent of multi-core processors and their new scalable approach to concurrency. With this guide you'll learn how to write complex concurrent programs in Erlang, regardless of your programming background or experience. Written by leaders of the international Erlang community -- and based on their training material -- Erlang Programming focuses on the language's syntax and semantics, and explains pattern matching, proper lists, recursion, debugging, networking, and concurrency. This book helps you: Understand the strengths of Erlang and why its designers included specific features Learn the concepts behind concurrency and Erlang's way of handling it Write efficient Erlang programs while keeping code neat and readable Discover how Erlang fills the requirements for distributed systems Add simple graphical user interfaces with little effort Learn Erlang's tracing mechanisms for debugging concurrent and distributed systems Use the built-in Mnesia database and other table storage features Erlang Programming provides exercises at the end of each chapter and simple examples throughout the book.

One of the grand challenges of artificial intelligence is to enable computers to interpret 3D scenes and objects from imagery. This book organizes and introduces major concepts in 3D scene and object representation and inference from still images, with a focus on recent efforts to fuse models of geometry and perspective with statistical machine learning. The book is organized into three sections: (1) Interpretation of Physical Space; (2) Recognition of 3D Objects; and (3) Integrated 3D Scene Interpretation. The first discusses representations of spatial layout and techniques to interpret physical scenes from images. The second section introduces representations for 3D object categories that account for the intrinsically 3D nature of objects and provide robustness to change in viewpoints. The third section discusses strategies to unite inference of scene geometry and object pose and identity into a coherent scene interpretation. Each section broadly surveys important ideas from cognitive science and artificial intelligence research, organizes and discusses key concepts and techniques from recent work in computer vision, and describes a few sample approaches in detail. Newcomers to computer vision will benefit from introductions to basic concepts, such as single-view geometry and image classification, while experts and novices alike may find inspiration from the book's organization and discussion of the most recent ideas in 3D scene understanding and 3D object recognition. Specific topics include: mathematics of perspective geometry; visual elements of the physical scene, structural 3D scene representations; techniques and features for image and region categorization; historical perspective, computational models, and datasets and machine learning techniques for 3D object recognition; inferences of geometrical attributes of objects, such as size and pose; and probabilistic and feature-passing approaches for contextual reasoning about 3D objects and scenes. Table of Contents: Background on 3D Scene Models / Single-view Geometry / Modeling the Physical Scene / Categorizing Images and Regions / Examples of 3D Scene Interpretation / Background on 3D Recognition / Modeling 3D Objects / Recognizing and Understanding 3D Objects / Examples of 2D 1/2 Layout Models / Reasoning about Objects and Scenes / Cascades of Classifiers / Conclusion and Future Directions

What will you learn from this book? Dive into C# and create apps, user interfaces, games, and more using this fun and highly visual introduction to C#, .NET Core, and Visual Studio. With this completely updated guide, which covers C# 8.0 and Visual Studio 2019, beginning programmers like you will build a fully functional game in the opening chapter. Then you'll learn how to use classes and object-oriented programming, create 3D games in Unity, and query data with LINQ. And you'll do it all by solving puzzles, doing hands-on exercises, and building real-world applications. By the time you're done, you'll be a solid C# programmer--and you'll have a great time along the way! What's so special about this book? Based on the latest research in cognitive science and learning theory, Head First C# uses a visually rich format to engage your mind rather than a text-heavy approach that puts you to sleep. Why waste your time struggling with new concepts? This multisensory learning experience is designed for the way your brain really works.

The Mono Project is the much talked-about open source initiative to create a Unix implementation of Microsoft's .NET Development Framework. Its purpose is to allow Unix developers to build and deploy cross-platform .NET applications. The project has also sparked interest in developing components, libraries and frameworks with C#, the programming

language of .NET. The controversy? Some say Mono will become the preferred platform for Linux development, empowering Linux/Unix developers. Others say it will allow Microsoft to embrace, extend, and extinguish Linux. The controversy rages on, but--like many developers--maybe you've had enough talk and want to see what Mono is really all about. There's one way to find out: roll up your sleeves, get to work, and see what you Mono can do. How do you start? You can research Mono at length. You can play around with it, hoping to figure things out for yourself. Or, you can get straight to work with Mono: A Developer's Notebook--a hands-on guide and your trusty lab partner as you explore Mono 1.0. Light on theory and long on practical application, Mono: A Developer's Notebook bypasses the talk and theory, and jumps right into Mono 1.0. Diving quickly into a rapid tour of Mono, you'll work through nearly fifty mini-projects that will introduce you to the most important and compelling aspects of the 1.0 release. Using the task-oriented format of this new series, you'll learn how to acquire, install, and run Mono on Linux, Windows, or Mac OS X. You'll work with the various Mono components: Gtk#, the Common Language Runtime, the class libraries (both .NET and Mono-provided class libraries), IKVM and the Mono C# compiler. No other resource will take you so deeply into Mono so quickly or show you as effectively what Mono is capable of. The new Developer's Notebooks series from O'Reilly covers important new tools for software developers. Emphasizing example over explanation and practice over theory, they focus on learning by doing--you'll get the goods straight from the masters, in an informal and code-intensive style that suits developers. If you've been curious about Mono, but haven't known where to start, this no-fluff, lab-style guide is the solution.

Take full creative control of your web applications with Flask, the Python-based microframework. With this hands-on book, you'll learn Flask from the ground up by developing a complete social blogging application step-by-step. Author Miguel Grinberg walks you through the framework's core functionality, and shows you how to extend applications with advanced web techniques such as database migration and web service communication. Rather than impose development guidelines as other frameworks do, Flask leaves the business of extensions up to you. If you have Python experience, this book shows you how to take advantage of that creative freedom. Learn Flask's basic application structure and write an example app Work with must-have components—templates, databases, web forms, and email support Use packages and modules to structure a large application that scales Implement user authentication, roles, and profiles Build a blogging feature by reusing templates, paginating item lists, and working with rich text Use a Flask-based RESTful API to expose app functionality to smartphones, tablets, and other third-party clients Learn how to run unit tests and enhance application performance Explore options for deploying your web app to a production server

Subclassing and the Windows hooking mechanism ("hooks") allow developers to manipulate, modify, or even discard messages bound for other objects within the operating system. This book provides several possibilities to the Visual Basic developer. If you want to learn how to build efficient user interfaces with React, this is your book. Authors Alex Banks and Eve Porcello show you how to create UIs with this small JavaScript library that can deftly display data changes on large-scale, data-driven websites without page reloads. Along the way, you'll learn how to work with functional programming and the latest ECMAScript features. Developed by Facebook, and used by companies including Netflix, Walmart, and The New York Times for large parts of their web interfaces, React is quickly growing in use. By learning how to build React components with this hands-on guide, you'll fully understand how useful React can be in your organization. Learn key functional programming concepts with JavaScript Peek under the hood to understand how React runs in the browser Create application presentation layers by mounting and composing React components Use component trees to manage data and reduce the time you spend debugging applications Explore React's component lifecycle and use it to load data and improve UI performance Use a routing solution for browser history, bookmarks, and other features of single-page applications Learn how to structure React applications with servers in mind -Access Real mode from Protected mode; Protected mode from Real mode Apply OOP concepts to assembly language programs Interface assembly language programs with high-level languages Achieve direct hardware manipulation and memory access Explore the archite

When you have questions about C# 7.0 or the .NET CLR and its core Framework assemblies, this bestselling guide has the answers you need. Since its debut in 2000, C# has become a language of unusual flexibility and breadth, but its continual growth means there's always more to learn. Organized around concepts and use cases, this updated edition provides intermediate and advanced programmers with a concise map of C# and .NET knowledge. Dive in and discover why this Nutshell guide is considered the definitive reference on C#. Get up to speed on the C# language, from the basics of syntax and variables to advanced topics such as pointers, operator overloading, and dynamic binding Dig deep into LINQ via three chapters dedicated to the topic Explore concurrency and asynchrony, advanced threading, and parallel programming Work with .NET features, including XML, regular expressions, networking, serialization, reflection, application domains, and security Delve into Roslyn, the modular C# 7.0 compiler-as-a-service

Skip the basics and delve right into Visual Studio 2017 advanced features and tools Professional Visual Studio 2017 is the industry-favorite guide to getting the most out of Microsoft's primary programming technology. From touring the new UI to exploiting advanced functionality, this book is designed to help professional developers become more productive. A unique IDE-centric approach provides a clear path through the typical workflow while exploring the nooks and crannies that can make your job easier. Visual Studio 2017 includes a host of features aimed at improving developer productivity and UI, and this book covers them all with clear explanation, new figures, and expert insight. Whether you're new to VS or just upgrading, this all-inclusive guide is an essential resource to keep within arm's reach. Visual Studio 2017 fixes the crucial issues that kept professionals from adopting VS 2015, and includes new features and tools that streamline the developer's job. This book provides the straightforward answers you need so you can get up to speed quickly and get back to work. Master the core functionality of Visual Studio 2017 Dig into the tools that make writing code easier Tailor the environment to your workflow, not the other way around Work your way through configuration, debugging, building, deployment, customizing, and more Microsoft is changing their release cadence—it's only been about two years since the last release—so developers need to quickly get a handle on new tools and features if they hope to remain productive. The 2017 release is designed specifically to help you get more done, in less time, with greater accuracy and attention to detail. If you're ready to get acquainted, Professional Visual Studio 2017 is your ideal guide.

Curland, a developer for Microsoft, demonstrates techniques programmers can use to write reusable Visual Basic (VB) code, and

how to leverage the close relationships between VB, COM, and OLE automation to extend VB's capabilities. The book alternates between a low-level look at the data underlying array, object, and string types and practical applications of these structures. The CD-ROM contains source code sample that enable techniques without external DLLs. Annotation copyrighted by Book News, Inc., Portland, OR

If you're grounded in the basics of Objective-C and Xcode, this practical guide takes you through the components you need for building your own iOS apps. With examples from real apps and programming situations, you'll learn how to create views, manipulate view controllers, and use iOS frameworks for adding features such as audio and video. Learn how to create, arrange, draw, layer, and animate views—and make them respond to touch Use view controllers to manage multiple screens of material in a way that's understandable to users Explore UIKit interface widgets in-depth, such as scroll views, table views, text, web views, and controls Delve into Cocoa frameworks for sensors, maps, location, sound, and video Access user libraries: music, photos, address book, and calendar Examine additional topics including files, threading, and networking New iOS 7 topics covered include asset catalogs, snapshots, template images, keyframe and spring view animation, motion effects, tint color, fullscreen views and bar underlapping, background downloading and app refresh, Text Kit, Dynamic Type, speech synthesis, and many others. Example projects are available on GitHub. Want to brush up on the basics? Pick up iOS 7 Programming Fundamentals to learn about Objective-C, Xcode, and Cocoa language features such as notifications, delegation, memory management, and key-value coding. Together with Programming iOS 7, you'll gain a solid, rigorous, and practical understanding of iOS 7 development. Furnishes complete documentation for Visual Basic programmers seeking to access the Win32 API within Visual Basic and explains to create powerful applications without requiring a background in Visual C++ or Win32 API programming. Original. (Advanced)

This book is intended for enthusiasts, computer science students, and compiler engineers interested in learning about the LLVM framework. You need a background in C++ and, although not mandatory, should know at least some compiler theory. Whether you are a newcomer or a compiler expert, this book provides a practical introduction to LLVM and avoids complex scenarios. If you are interested enough and excited about this technology, then this book is definitely for you.

A guide for beginners offers an overview of JavaScript basics and explains how to create Web pages, identify browsers, and integrate sound, graphics, and animation into Web applications

In Programming VB .NET: A Guide for Experienced Programmers, authors Gary Cornell and Jonathan Morrison carefully explain the exciting features of Visual Basic .NET. Since VB .NET is, for all practical purposes, a whole new language even for the most experienced Visual Basic programmers, developers need to think differently about many familiar topics. Cornell and Morrison are there to help you with careful discussions of each topic. Cornell and Morrison write from the point of view of the experienced programmer, with constant references to the changes from earlier versions of VB. Developers learn how to use VB .NET for database programming through ADO.NET and web programming through ASP.NET. After reading Programming VB .NET: A Guide for Experienced Programmers, developers will have a firm grasp of the exciting VB .NET language and its uses in creating powerful .NET applications.

"Learn Visual J++ basics - the IDE, debugger, Developer Studio, and more; learn the basics of the Java programming language in the Visual J++ environment; design and create graphical user interfaces with Visual J++; study advanced J++, including graphics, exception handling, and Visual J++ on a network; and integrate JavaScript and VBScript with Visual J++." "CD-ROM includes Microsoft Visual J++ 1.0, Publisher's Edition, ObjectSpace's Java Generic Library (JGL), trial versions of Jamba and OLETools 5.0, JDesigner Pro from Bulletproof Corp., HotDog32 from Sausage Software, authors' source code and examples from the book, and more!"--BOOK JACKET.Title Summary field provided by Blackwell North America, Inc. All Rights Reserved

"We finally have the definitive treatise on PyTorch! It covers the basics and abstractions in great detail. I hope this book becomes your extended reference document." —Soumith Chintala, co-creator of PyTorch Key Features Written by PyTorch's creator and key contributors Develop deep learning models in a familiar Pythonic way Use PyTorch to build an image classifier for cancer detection Diagnose problems with your neural network and improve training with data augmentation Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About The Book Every other day we hear about new ways to put deep learning to good use: improved medical imaging, accurate credit card fraud detection, long range weather forecasting, and more. PyTorch puts these superpowers in your hands. Instantly familiar to anyone who knows Python data tools like NumPy and Scikit-learn, PyTorch simplifies deep learning without sacrificing advanced features. It's great for building quick models, and it scales smoothly from laptop to enterprise. Deep Learning with PyTorch teaches you to create deep learning and neural network systems with PyTorch. This practical book gets you to work right away building a tumor image classifier from scratch. After covering the basics, you'll learn best practices for the entire deep learning pipeline, tackling advanced projects as your PyTorch skills become more sophisticated. All code samples are easy to explore in downloadable Jupyter notebooks. What You Will Learn Understanding deep learning data structures such as tensors and neural networks Best practices for the PyTorch Tensor API, loading data in Python, and visualizing results Implementing modules and loss functions Utilizing pretrained models from PyTorch Hub Methods for training networks with limited inputs Sifting through unreliable results to diagnose and fix problems in your neural network Improve your results with augmented data, better model architecture, and fine tuning This Book Is Written For For Python programmers with an interest in machine learning. No experience with PyTorch or other deep learning frameworks is required. About The Authors Eli Stevens has worked in Silicon Valley for the past 15 years as a software engineer, and the past 7 years as Chief Technical Officer of a startup making medical device software. Luca Antiga is co-founder and CEO of an AI engineering company located in Bergamo, Italy, and a regular contributor to PyTorch. Thomas Viehmann is a Machine Learning and PyTorch speciality trainer and consultant based in Munich, Germany and a PyTorch core developer. Table of Contents PART 1 - CORE PYTORCH 1 Introducing deep learning and the PyTorch Library 2 Pretrained networks 3 It starts with a tensor 4 Real-world data representation using tensors 5 The mechanics of learning 6 Using a neural network to fit the data 7 Telling birds from airplanes: Learning from images 8 Using convolutions to generalize PART 2 - LEARNING FROM IMAGES IN THE REAL WORLD: EARLY DETECTION OF LUNG CANCER 9 Using PyTorch to fight cancer 10 Combining data sources into a unified dataset 11 Training a classification model to detect suspected tumors 12 Improving training with metrics and augmentation 13 Using segmentation to find suspected nodules 14 End-to-end nodule analysis, and where to go next PART 3 - DEPLOYMENT 15 Deploying to production

A guide on how to reverse engineer legacy systems to understand their problems, and then reengineer those systems to meet

new demands. It uses patterns to clarify and explain the process of understanding large code bases, hence transforming them to meet new requirements.

A catalog of solutions to commonly occurring design problems, presenting 23 patterns that allow designers to create flexible and reusable designs for object-oriented software. Describes the circumstances in which each pattern is applicable, and discusses the consequences and trade-offs of using the pattern within a larger design. Patterns are compiled from real systems, and include code for implementation in object-oriented programming languages like C++ and Smalltalk. Includes a bibliography. Annotation copyright by Book News, Inc., Portland, OR

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