Advanced NET Debugging (Addison Wesley Microsoft Technology)

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 selfcontained 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.

In the Information Society, the smart card, or smart device with its processing power and link to its owner, will be the potential human representation or delegate in Ambient Intelligence (Pervasive) Computing), where every appliance or computer will be connected, and where control and trust of the personal environment will be the next decade challenge. Smart card research is of increasing importance as the need for information security grows rapidly. Smart cards will play a very large role in ID management in secure systems. In many computer science areas, smart cards introduce new dimensions and opportunities. Disciplines like hardware design, operating systems, modeling systems, cryptography and distributed systems find new areas of applications or issues; smart cards also create new challenges for these domains. CARDIS, the IFIP Conference on Smart Card Research and Advanced Applications, gathers researchers and technologists who are focused in all aspects of the design, development, deployment, validation and application of smart cards or smart personal devices. This volume contains the 20 papers that have been selected by the CARDIS Program Committee for presentation at the 6th International Conference on Smart Card Research and Advanced Applications (CARDIS 2004), which was held in conjunction with the IFIP 18th World Computer Congress in Toulouse, France in August 2004 and sponsored by the International Federation for Information Processing (IFIP). With 20% of the papers coming from Asia, 20% from America, and 60% from Europe, the competition was particularly severe this year, with only 20 papers selected out of 45 very good submissions. Smart Card Research and Advanced Applications VI presents the latest advances in smart card research and applications, and will be essential reading for developers of smart cards and smart card applications, as well as for computer science researchers in computer architecture, computer security, and cryptography. "For an engineer determined to refine and secure Internet operation or to explore alternative solutions to persistent problems, the insights provided by this book will be invaluable." -Vint Cerf, Internet pioneer TCP/IP Illustrated, Volume 1, Second Edition, is a detailed and visual guide to today's TCP/IP protocol suite. Fully updated for the newest innovations, it demonstrates each protocol in action through realistic examples from modern Linux, Windows, and Mac OS environments. There's no better way to discover why TCP/IP works as it does, how it reacts to common conditions, and how to apply it in your own applications and networks. Building on the late W. Richard Stevens' classic first edition, author Kevin R. Fall adds his cutting-edge experience as a leader in TCP/IP protocol research, updating the book to fully reflect the latest protocols and best practices. He first introduces TCP/IP's core goals and architectural concepts, showing how they can robustly connect diverse networks and support multiple services running concurrently. Next, he carefully explains Internet addressing in both IPv4 and IPv6 networks. Then, he walks through TCP/IP's structure and function from the bottom up: from link layer protocols-such as Ethernet and Wi-Fi-through network, transport, and application layers. Fall thoroughly introduces ARP, DHCP, NAT, firewalls, ICMPv4/ICMPv6, broadcasting, multicasting, UDP, DNS, and much more. He offers extensive coverage of reliable transport and TCP, including connection management, timeout, retransmission, interactive data flow, and congestion control. Finally, he introduces the basics of security and cryptography, and illuminates the crucial modern protocols for protecting security and privacy, including EAP, IPsec, TLS, DNSSEC, and DKIM. Whatever your TCP/IP experience, this book will help you gain a deeper, more intuitive understanding of the entire protocol suite so you can build better applications and run more reliable, efficient networks.

CUDA is a computing architecture designed to facilitate the development of parallel programs. In conjunction with a comprehensive software platform, the CUDA Architecture enables programmers to draw on the immense power of graphics processing units (GPUs) when building high-performance applications. GPUs, of course, have long been available for demanding graphics and game applications. CUDA now brings this valuable resource to programmers working on applications in other domains, including science, engineering, and finance. No knowledge of graphics programming is required-just the ability to program in a modestly extended version of C. CUDA by Example, written by two senior members of the CUDA software platform team, shows programmers how to employ this new technology. The authors introduce each area of CUDA development through working examples. After a concise introduction to the CUDA platform and architecture, as well as a quick-start guide to CUDA C, the book details the techniques and trade-offs associated with each key CUDA feature. You'll discover when to use each CUDA C extension and how to write CUDA software that delivers truly outstanding performance. Major topics covered include Parallel programming Thread cooperation Constant memory and events Texture memory Graphics interoperability Atomics Streams CUDA C on multiple GPUs Advanced atomics Additional CUDA resources All the CUDA software tools you'll need are freely available for download from NVIDIA. http://developer.nvidia.com/object/cuda-by-example.html Pro .NET Performance

The Practice of System and Network Administration

Tools and Techniques for Large Scale Solutions Reversing OpenGL Programming Guide Advanced Programming in the UNIX Environment

An Introduction to General-Purpose GPU Programming, Portable Documents

Beginning with a basic primer on reverse engineering-including computer internals, operating systems, and assembly language-and then discussing the various applications of reverse engineering, this book provides readers with practical, in-depth techniques for software reverse engineering. The book is broken into two parts, the first deals with security-related reverse engineering and the second explores the more practical aspects of reverse engineering. In addition, the author explains how to reverse engineer a third-party software library to improve interfacing and how to reverse engineer a competitor's software to build a better product. * The first popular book to show how software reverse engineering can help defend against security threats, speed up development, and unlock the secrets of competitive products * Helps developers plug security holes by demonstrating how hackers exploit reverse engineering techniques to crack copy-protection schemes and identify software targets for viruses and other malware * Offers a primer on advanced reverse-engineering, delving into "disassembly"-code-level reverse engineering-and explaining how to decipher assembly language

Most Visual Basic .NET books are written for experienced object-oriented programmers, but many programmers jumping on the .NET bandwagon are coming from non-object-oriented languages, such as Visual Basic 6.0 or from script programming, such as JavaScript. These programmers, and those who are adopting VB.NET as their first programming language, have been out of luck when it comes to finding a high-quality introduction to the language that helps them get started. That's why Jesse Liberty, author of the best-selling books Programming C# and Programming ASP.NET, has written an entry-level guide to Visual Basic .NET. Written in a warm and friendly manner, this book assumes no prior programming experience, and provides an easy introduction to Microsoft's most popular .NET language.Learning Visual Basic .NET is a complete introduction to VB.NET and object-oriented programming. This book will help you build a solid foundation in .NET, and show how to apply your skills by using hundreds of examples to help you become productive quickly. Learning Visual Basic .NET introduces fundamentals like Visual Studio .NET, a tool set for building Windows and Web applications. You'll learn about the syntax and structure of the Visual Basic .NET language, including operators, classes and interfaces, structs, arrays, and strings. Liberty then demonstrates how to develop various kinds of applications--including those that work with databases--and web services.By the time you've finished Learning Visual Basic .NET, you'll be ready to move on to a more advanced programming guide that will help you create large-scale web and Windows applications.Whether you have a little object-oriented programming experience or you are new to programming altogether, Visual Basic .NET will set you firmly on your way to mastering the essentials of the VB.NET language.

This expanded and updated edition of "Practical Enterprise Software Development Techniques" includes a new chapter which explains what makes enterprise scale software development different from other development endeavors. Chapter 4 has been expanded with additional coverage of code review, bug tracker systems and agile software applications. The chapter order has been changed in response to feedback from readers and instructors who have taught classes using the previous version (which was also published by Apress). This book provides an overview of tools and techniques used in enterprise software development, many of which are not taught in academic programs or learned on the job. This is an ideal resource containing lots of practical information and code examples that you need to master as a member of an enterprise development team. This book aggregates many of these "on the job" tools and techniques into a concise format and presents them as both discussion topics and with code examples. The reader will not only get an overview of these tools and techniques, but also several discussions concerning operational aspects of enterprise software development and how it differs from smaller development efforts. For example, in the chapter on Design Patterns and Architecture, the author describes the basics of design patterns but only highlights those that are more important in enterprise applications due to separation of duties, enterprise security, etc. The architecture discussion revolves has a similar emphasis – different teams may manage different aspects of the application's components with little or no access to the developer. This aspect of restricted access is also mentioned in the section on logging. Theory of logging and discussions of what to log are briefly mentioned, the configuration of the logging tools is demonstrated along with a discussion of why it's very important in an enterprise environment.

The First In-Depth, Real-World, Insider's Guide to Powerful Windows Debugging For Windows developers, few tasks are more challenging than debugging – -or more crucial. Reliable and realistic information about Windows debugging has always been scarce. Now, with over 15 years of experience two of Microsoft's system-level developers present a thorough and practical guide to Windows debugging ever written. Mario Hewardt and Daniel Pravat cover debugging throughout the entire application lifecycle and show how to make the most of the tools currently available – -including Microsoft's powerful native debuggers and third-party solutions. To help you find real solutions fast, this book is organized around real-world debugging scenarios. Hewardt and Pravat use detailed code examples to illuminate the complex debugging challenges professional developers actually face. From core Windows operating system concepts to security, Windows® Vista[™] and 64-bit debugging, they address emerging topics head-on – and nothing is ever oversimplified or glossed over!

Practical Software Development Techniques

The Pragmatic Programmer The Rootkit Arsenal: Escape and Evasion CUDA by Example A Tutorial and Analysis The Protocols

As networks, devices, and systems continue to evolve, software engineers face the unique challenge of creating reliable distributed applications within frequently changing environments. C++ Network Programming, Volume 1, provides practical solutions for developing and optimizing complex distributed systems using the ADAPTIVE Communication Environment (ACE), a revolutionary open-source framework that runs on dozens of hardware platforms and operating systems. This book guides software professionals through the traps and pitfalls of developing efficient, portable, and flexible networked applications. It explores the inherent design complexities of concurrent networked applications and the tradeoffs that must be considered when working to master them. C++ Network Programming begins with an overview of the issues and tools involved in writing distributed concurrent applications. The book then provides the essential design dimensions, patterns, and principles needed to develop flexible and efficient concurrent networked applications. The book's expert author team shows you how to enhance design skills while applying C++ and patterns effectively to develop object-oriented networked applications. Readers will find coverage of: C++ network programming, including an overview and strategies for addressing common development challenges The ACE Toolkit Connection protocols, message exchange, and message-passing versus shared memory Implementation methods for reusable networked application services Concurrency in object-oriented network programming Design principles and patterns for ACE wrapper facades With this book, C++ developers have at their disposal the most complete toolkit available for developing successful, multiplatform, concurrent networked applications with ease and efficiency.

The only complete, pragmatic guide to the advanced CLR debugging techniques developers need to find and fix the toughest .NET software bugs. • •By Mario Hewardt, co-author of the best-selling, widely-praised Advanced Windows Debugging... •Shows how to use .NET's powerful native CLR debugging tools to track down challenging bugs far more quickly. •Includes the best coverage of .NET memory debugging available anywhere. •Illuminates the debugging implications of the latest .NET 4.0 runtime changes. Advanced .NET Debugging is the definitive guide to tracking down the most complex and challenging bugs in today's .NET application code. Authored by Mario Hewardt, co-author of the widely-praised Advanced Windows Debugging this is the only book to focus entirely on .NET's immensely powerful native debugging Tools for Windows, including WinDBG and SoS. Using this book, experienced .NET programmers will be able to analyze problematic code and identify the root causes of problems far more quickly than they ever could with visual tools. Hewardt begins by introducing the essential concepts developers must master in order to debug code with the native debuggers, including the tools available, the core fundamentals of the .NET CLR runtime, and essential debugging tasks. Next, he turns to sophisticated debugging techniques, teaching through real-world examples that demonstrate a broad spectrum of common C# programming errors. Hewardt thoroughly covers postmortem debugging without access to the physical machine; PowerDBG and other .NET debugging 'power tools'; and, finally, the debugging implications of the brandnew .NET CLR 4.0.

Maximizing the performance of your algorithms and applications is extremely important and can give you a competitive advantage, a lower cost of ownership, and happier users. Pro .NET Performance explains the internals of Windows, the CLR, and the physical

hardware that affect the performance of your applications, and gives you the knowledge and tools to measure how your code performs in isolation from external factors. The book is full of C# code samples and tips to help you squeeze every bit of juice from your application–lower memory utilization, consistent CPU usage, and fewer I/O operations across the network and disk. Pro .NET Performance will change the way you think about .NET application development. Guides you through performance measurement with a variety of profilers and other tools Explains how OS and CLR internals affect your application's performance in unexpected ways Provides you with tips and real-life case studies for improving application performance. NET Internals and Advanced Debugging Techniques
Advanced CORBA® Programming with C++
Architecture, Design, and Process
Secrets of Reverse Engineering
Learning Visual Basic .NET
Concurrent Programming on Windows
A Guide to Systematic Debugging
Tochniques of performance on the performance on Verifying Code. Predicting Errors, and Preventing Errors. Cutting-edge tools such as EindBUGS and AGITAR are explained, techniques from integrated envir

This fully updated second edition includes 100+ pages of new material, including new chapters on Verifying Code, Predicting Errors, and Preventing Errors. Cutting-edge tools such as FindBUGS and AGITAR are explained, techniques from integrated environme and all-new demos with ESC/Java and Spec#, Eclipse and Mozilla are included. This complete and pragmatic overview of debugging is authored by Andreas Zeller, the talented researcher who developed the GNU Data Display Debugger(DDD), a tool that over 2 the data structures of programs while they are running. Unlike other books on debugging, Zeller's text is product agnostic, appropriate for all programming languages and skill levels. Why Programs Fail explains best practices ranging from systematically trac symptoms, reproducing errors, and correcting defects. It covers a wide range of tools and techniques from hands-on observation to fully automated diagnoses, and also explores the author's innovative techniques for isolating minimal input to reproduce an through a program. It even includes instructions on how to create automated debugging tools. The new edition of this award-winning productivity-booster is for any developer who has ever been frustrated by elusive bugs. Brand new chapters demonstrate tools, enabling readers to put the latest time-saving developments to work for them. Learn by doing. New exercises and detailed examples focus on emerging tools, languages and environments, including AGITAR, FindBUGS, Python and Eclipse. The text includ references for further study, and a companion website with source code for all examples and additional debugging resources.

Dynamic binary modification tools form a software layer between a running application and the underlying operating system, providing the powerful opportunity to inspect and potentially modify every user-level guest application instruction that executes. To enabled computer architects to build powerful simulators and emulators for design-space exploration, compiler writers to analyze and debug the code generated by their compilers, software developers to fully explore the features, bottlenecks, and performa to extend the functionality of proprietary software running on their computers. Several dynamic binary modification systems are freely available today that place this power into the hands of the end user. While these systems are quite complex internally, the learn API that allows a typical user to ramp up fairly quickly and build any of a number of powerful tools. Meanwhile, these tools are robust enough to form the foundation for software products in use today. This book serves as a primer for researchers int systems, their internal design structure, and the wide range of tools that can be built leveraging these systems. The hands-on examples presented throughout form a solid foundation for designing and constructing more complex tools, with an appreciation tools robust and efficient. Meanwhile, the reader will get an appreciation for the internal design of the engines themselves. Table of Contents: Dynamic Binary Modification: Overview / Using a Dynamic Binary Modifier / Program Analysis and Debugging / Act Architectural Exploration / Advanced System Internals / Historical Perspectives / Summary and Observations

Offers application debugging techniques for Microsoft .NET 2.0, covering topics such as exception monitoring, crash handlers, and multithreaded deadlocks.

bull; bull;Extends the proven concept of design patterns to the relatively new field of .NET design and development bull;Part of the acclaimed Addison-Wesley Software Patterns Series, with John Vlissides as series editor bull;Includes helpful primers on XML a coverage of debugging, exceptions, error handling, and architecture

IFIP 18th World Computer Congress TC8/WG8.8 & TC11/WG11.2 Sixth International Conference on Smart Card Research and Advanced Applications (CARDIS) 22–27 August 2004 Toulouse, France

Mastering Complexity with ACE and Patterns, Portable Documents

Think Julia

Practical Enterprise Software Development Techniques

TCP/IP Illustrated, Volume 1

NET Patterns

Programming in C

Get Free Advanced NET Debugging (Addison Wesley Microsoft Technology)

If you're just learning how to program, Julia is an excellent JIT-compiled, dynamically typed language with a clean syntax. This hands-on guide uses Julia 1.0 to walk you through programming one step at a time, beginning with basic programming concepts before moving on to more advanced capabilities, such as creating new types and multiple dispatch. Designed from the beginning for high performance, Julia is a general-purpose language ideal for not only numerical analysis and computational science but also web programming and scripting. Through exercises in each chapter, you'll try out programming concepts as you learn them. Think Julia is perfect for students at the high school or college level as well as self-learners and professionals who need to learn programming basics. Start with the basics, including language syntax and semantics Get a clear definition of each programming concept Learn about values, variables, statements, functions, and data structures in a logical progression Discover how to work with files and databases Understand types, methods, and multiple dispatch Use debugging techniques to fix syntax, runtime, and semantic errors Explore interface design and data structures through case studies

BPF and related observability tools give software professionals unprecedented visibility into software, helping them analyze operating system and application performance, troubleshoot code, and strengthen security. BPF Performance Tools: Linux System and Application Observability is the industry's most comprehensive guide to using these tools for observability. Brendan Gregg, author of the industry's definitive guide to system performance, introduces powerful new methods and tools for doing analysis that leads to more robust, reliable, and safer code. This authoritative guide: Explores a wide spectrum of software and hardware targets Thoroughly covers open source BPF tools from the Linux Foundation iovisor project's bcc and bpftrace repositories Summarizes performance engineering and kernel internals you need to understand Provides and discusses 150+ bpftrace tools, including 80 written specifically for this book: tools you can run as-is, without programming – or customize and develop further, using diverse interfaces and the bpftrace front-end You'll learn how to use BPF (eBPF) tracing tools to analyze CPUs, memory, disks, file systems, networking, languages, applications, containers, hypervisors, security, and the Linux kernel. You'll move from basic to advanced tools and techniques, producing new metrics, stack traces, custom latency histograms, and more. It's like having a superpower: with Gregg's guidance and tools, you can analyze virtually everything that impacts system performance, so you can improve virtually any Linux operating system or application.

Understand .NET memory management internal workings, pitfalls, and techniques in order to effectively avoid a wide range of performance and scalability problems in your software. Despite automatic memory management in .NET, there are many advantages to be found in understanding how .NET memory works and how you can best write software that interacts with it efficiently and effectively. Pro .NET Memory Management is your comprehensive guide to writing better software by understanding and working with memory management in .NET. Thoroughly vetted by the .NET Team at Microsoft, this book contains 25 valuable troubleshooting scenarios designed to help diagnose challenging memory problems. Readers will also benefit from a multitude of .NET memory management "rules" to live by that introduce methods for writing memory-aware code and the means for avoiding common, destructive pitfalls. What You'll LearnUnderstand the theoretical underpinnings of automatic memory management Take a deep dive into every aspect of .NET memory management, including detailed coverage of garbage collection (GC) implementation, that would otherwise take years of experience to acquire Get practical advice on how this knowledge can be applied in real-world software development Use practical knowledge of tools related to .NET memory management to diagnose various memory-related issuesExplore various aspects of advanced memory management, including use of Span and Memory types Who This Book Is For .NET developers, solution architects, and performance engineers

With 28 new chapters, the third edition of The Practice of System and Network Administration innovates yet again! Revised with thousands of updates and clarifications based on reader feedback, this new edition also incorporates DevOps strategies even for non-DevOps environments. Whether you use Linux, Unix, or Windows, this new edition describes the essential practices previously handed down only from mentor to protégé. This wonderfully lucid, often funny cornucopia of information introduces beginners to advanced frameworks valuable for their entire career, yet is structured to help even experts through difficult projects. Other books tell you what commands to type. This book teaches you the cross-platform strategies that are timeless! DevOps techniques: Apply DevOps principles to enterprise IT infrastructure, even in environments without developers Game-changing strategies: New ways to deliver results faster with less stress Fleet management: A comprehensive guide to managing your fleet of desktops, laptops, servers and mobile devices Service management: How to design, launch, upgrade and migrate services Measurable improvement: Assess your operational effectiveness; a forty-page, pain-free assessment system you can start using today to raise the quality of all services Design guides: Best practices for networks, data centers, email, storage, monitoring, backups and more Management skills: Organization design, communication, negotiation, ethics, hiring and firing, and more Have you ever had any of these problems? Have you been surprised to discover your backup tapes are blank? Ever spent a year launching a new service only to be told the users hate i? Do you have more incoming support requests than you can handle? Do you spend more time fixing problems than building the next awesome thing? Have you suffered from a botched migration of thousands of users to a new service? Does your company rely on a computer that, if it died, can't be rebuilt? Is your network a fragile mess that breaks any time you try to impro

Tools and Techniques for Building Enterprise Software Introducing the Language, .NET Programming & Object Oriented Software Development Android Hacker's Handbook For Better Code, Performance, and Scalability A Book on C From Journeyman to Master

Pro .NET Memory Management

With the growing prevalence of the Internet, rootkit technology has taken center stage in the battle between White Hats and Black Hats. Adopting an approach that favors full disclosure, The Rootkit Arsenal presents the most accessible, timely, and complete coverage of rootkit technology. This book covers more topics, in greater depth, than any other currently available. In doing so, the author forges through the murky back alleys of the Internet, shedding light on material that has traditionally been poorly documented, partially documented, or intentionally undocumented. Includes Complete Coverage of the OpenGL® Shading Language! Today's OpenGL software interface enables programmers to produce extraordinarily high-quality computer-generated images and interactive applications using 2D and 3D objects, color images, and programmable shaders. OpenGL® Programming Guide: The Official Guide to Learning OpenGL®, Version 4.3, Eighth Edition, has been almost completely rewritten and provides definitive, comprehensive information on OpenGL and the OpenGL Shading Language. This edition of the best-selling "Red Book" describes the features through OpenGL version 4.3. It also includes updated information and techniques formerly covered in OpenGL® Shading Language (the "Orange Book"). For the first time, this guide completely integrates shader techniques, alongside classic, function centric techniques. Extensive new text and code are presented, demonstrating the latest in OpenGL programming techniques. OpenGL® Programming Guide, Eighth Edition, provides clear explanations of OpenGL functionality and techniques, including processing geometric objects with vertex, tessellation, and geometry shaders using geometric transformations and viewing matrices; working with pixels and texture maps through fragment shaders; and advanced data techniques using framebuffer objects and compute shaders. New OpenGL features covered in this edition include Best practices and sample code for taking full advantage of shaders and the entire shading pipeline (including geometry and tessellation shaders) Integration into the rendering pipeline via compute shaders Techniques for binding multiple shader programs at once during application execution Latest GLSL features for doing advanced shading techniques Additional new techniques for optimizing graphics program performance Here is the CORBA book that every C++ software engineer has been waiting for. Advanced CORBA® Programming with C++ provides designers and developers with the tools required to understand CORBA technology at the architectural, design, and source code levels. This book offers hands-on explanations for building efficient applications, as well as lucid examples that provide practical advice on avoiding costly mistakes. With this book as a guide, programmers will find the support they need to successfully undertake industrial-strength CORBA development projects. The content is systematically arranged and presented so the book may be used as both a tutorial and a reference. The rich example programs in this definitive text show CORBA developers how to write clearer code that is more maintainable, portable, and efficient. The authors' detailed coverage of the IDL-to-C++ mapping moves beyond the mechanics of the APIs to discuss topics such as potential pitfalls and efficiency. An in-depth presentation of the new Portable Object Adapter (POA) explains how to take advantage of its numerous features to create scalable and high-performance servers. In addition, detailed discussion of advanced topics, such as garbage collection and multithreading, provides developers with the knowledge they need to write commercial applications. Other highlights In-depth coverage of IDL, including common idioms and design trade-offs Complete and detailed explanations of the Life Cycle, Naming, Trading, and Event Services Discussion of IIOP and implementation repositories Insight into the dynamic aspects of CORBA, such as dynamic typing and the new DynAny interfaces Advice on selecting appropriate application architectures and designs Detailed, portable, and vendor-independent source code Advanced .NET DebuggingAddison-Wesley Professional The Mythical Man-month The Official Guide to Learning OpenGL, Version 4.3 Understanding .NET **Optimize Your C# Applications** Essays on Software Engineering Tools, Techniques and Applications

Advanced Programming Language Design

A guide to debugging Windows applications for professional developers covers resource leaks, memory corruption, stack problems, release build problems, multithreading problems, and finding crash locations. The orderly Sweet-Williams are dismayed at their son's fondness for the messy pastime of gardening.

Now 100% updated to reflect Microsoft's latest platform advances, .NET Internals and Advanced Debugging Techniques, Second Edition offers focused, pragmatic guidance for tracking down today's most complex and challenging application bugs. Authored by Mario Hewardt, one of Microsoft's most respected developers, this is a "deep dive" into the most sophisticated debugging techniques for .NET 4/4.5+, Windows 8/8.1/RT, and the newest versions of Visual Studio. Hewardt helps you take full advantage of powerful debugging tools such as DebugDiag and PSSCOR; and illuminates crucial CLR concepts and behaviors every advanced Windows developer should understand. Step by step, he walks through a wide range of debugging tasks; addressing the assembly loader, managed heap, garbage collection, synchronization, interoperability, postmortem debugging, and the unique issues associated with debugging modern Windows 8 apps. This edition's extensive revisions range from the latest CLR constructs and debugging commands to major changes associated with memory, and new issues associated with WinRT process management. Reflecting his immense experience with Windows internals, Hewardt reveals how to quickly identify the real root causes of problems - so you can fix them far more rapidly and effectively.

The first comprehensive guide to discovering and preventingattacks on the Android OS As the Android operating system continues to increase its shareof the smartphone market, smartphone hacking remains a growingthreat. Written by experts who rank among the world's foremostAndroid security researchers, this book presents vulnerabilitydiscovery, analysis, and exploitation tools for the good guys. Following a detailed explanation of how the Android OS works andits overall security architecture, the authors examine howvulnerabilities can be discovered and exploits developed forvarious system components, preparing you to defend againstthem. If you are a mobile device administrator, security researcher, Android app developer, or consultant responsible for evaluatingAndroid security, you will find this guide is essential to yourtoolbox. A crack team of leading Android security researchers explainAndroid security risks, security design and architecture, rooting, fuzz testing, and vulnerability analysis Covers Android application building blocks and security as wellas debugging and auditing Android apps Prepares mobile device administrators, security researchers, Android app developers, and security consultants to defend Androidsystems against attack Android Hacker's Handbook is the first comprehensiveresource for IT professionals charged with smartphonesecurity. Volume 1: DevOps and other Best Practices for Enterprise IT

Debugging Microsoft .NET 2.0 Applications Learn Python 3 the Hard Way Why Programs Fail Windows Phone 7 for iPhone Developers Visual Basic .NET Power Coding NET Framework Security

"When you begin using multi-threading throughout an application, the importance of clean architecture and design is critical. . . . This places an emphasis on understanding not only the platform's capabilities but also emerging best practices. Joe does a great job interspersing best practices alongside theory throughout his book." - From the Foreword by Craig Mundie, Chief Research and Strategy Officer, Microsoft Corporation Author Joe Duffy has risen to the challenge of explaining how to write software that takes full advantage of concurrency and hardware parallelism. In Concurrent Programming on Windows, he explains how to design, implement, and maintain large-scale concurrent programs, primarily using C# and C++ for Windows. Duffy aims to give application, system, and library developers the tools and techniques needed to write efficient, safe code for multicore processors. This is important not only for the kinds of problems where concurrency is inherent and easily exploitable—such as server applications, compute-intensive image manipulation, financial analysis, simulations, and AI algorithms—but also for problems that can be speeded up using parallelism but require more effort—such as math libraries, sort routines, report generation, XML manipulation, and stream processing algorithms. Concurrent Programming on Windows has four major sections: The first introduces concurrency at a high level, followed by a section that focuses on the fundamental platform features, inner workings, and API details. Next, there is a section that describes common patterns, best practices, algorithms, and data structures that emerge while writing concurrency on Windows and .NET. 0805311912B04062001

Discusses how .NET technologies work and how they can be used, covering topics including Web services technologies, SOAP, CLR, Visual Basic.NET, the .NET framework class library, ADO.NET and ASP.NET.

You Will Learn Python 3! Zed Shaw has perfected the world's best system for learning Python 3. Follow it and you will succeed—just like the millions of beginners Zed has taught to date! You bring the discipline, commitment, and persistence; the author supplies everything else. In Learn Python 3 the Hard Way, you'll learn Python by working through 52 brilliantly crafted exercises. Read them. Type their code precisely. (No copying and pasting!) Fix your mistakes. Watch the programs run. As you do, you'll learn how a computer works; what good programs look like; and how to read, write, and think about code. Zed then teaches you even more in 5+ hours of video where he shows you how to break, fix, and debug your code—live, as he's doing the exercises. Install a complete Python environment Organize and write code Fix and break code Basic mathematics Variables Strings and text Interact with users Work with files Looping and logic Data structures using lists and dictionaries Program design Object-oriented programming Inheritance and composition Modules, classes, and objects Python packaging Automated testing Basic game development It'll be hard at first. But soon, you'll just get it—and that will feel great! This course will reward you for every minute you put into it. Soon, you'll know one of the world's most powerful, popular programming languages. You'll be a Python programmer. This Book Is Perfect For Total beginners with zero programming experience Junior developers who know one or two languages Returning professionals who haven't written code in years Seasoned professionals looking for a fast, simple, crash course in Python 3

Debugging Windows Programs

Dynamic Binary Modification

Comprehensive VB .NET Debugging

BPF Performance Tools

Smart Card Research and Advanced Applications VI

Computer Networking: A Top-Down Approach Featuring the Internet, 3/e

A Very Simple Introduction to the Terrifyingly Beautiful World of Computers and Code

bull; Demystifies aspects of Visual Basic .NET that are difficult to master, such as remoting, multithreading, reflection, security, and COM interoperability. bull; Contains in-depth coverage of topics barely touched upon in other books. bull; Author is a well-known and respected guru in the Microsoft programming community.

This book provides an overview of tools and techniques used in enterprise software development, many of which are not taught in academic programs or learned on the job. This is an ideal resource containing lots of practical information and code examples that you need to master as a member of an enterprise development team. This book aggregates many of these "on the job" tools and techniques into a concise format and presents them as both discussion topics and with code examples. The reader will not only get an overview of these tools and techniques, but also several discussions concerning operational aspects of enterprise software development and how it differs from smaller development efforts. For example, in the chapter on Design Patterns and Architecture, the author describes the basics of design patterns but only highlights those that are more important in enterprise applications due to separation of duties, enterprise security, etc. The architecture discussion revolves has a similar emphasis - different teams may manage different aspects of the application's components with little or no access to the developer. This aspect of restricted access is also mentioned in the section on logging. Theory of logging and discussions of what to log are briefly mentioned, the configuration of the logging tools is demonstrated along with a discussion of why it's very important in an enterprise environment.

The revision of the definitive guide to Unix system programming is now available in a more portable format.

Use Windows debuggers throughout the development cycle—and build better software Rethink your use of Windows debugging and tracing tools—and learn how to make them a key part of test-driven software development. Led by a member of the Windows Fundamentals Team at Microsoft, you'll apply expert debugging and tracing techniques—and sharpen your C++ and C# code analysis skills—through practical examples and common scenarios. Learn why experienced developers use debuggers in every step of the development process, and not just when bugs appear. Discover how to: Go behind the scenes to examine how powerful Windows debuggers work Catch bugs early in the development cycle with static and runtime analysis tools Gain practical strategies to tackle the most common code defects Apply expert tricks to handle user-mode and kernel-mode debugging tasks Implement postmortem techniques such as JIT and dump debugging Debug the concurrency and security aspects of your software Use debuggers to analyze interactions between your code and the operating system Analyze software behavior with Xperf and the Event Tracing for Windows (ETW) framework

Strategies, Tools, and Techniques for Visual C++ Programmers

How to Think Like a Computer Scientist

C++ Network Programming, Volume I

C# Deconstructed

Inside Windows Debugging

Discover how C# works on the .NET Framework

Advanced .NET Debugging

C# Deconstructed answers a seemingly simply question: Just what is going on, exactly, when you run C# code on the .NET Framework? To answer this question we will dig ever deeper into the structure of the C# language and the onion-skin abstraction layers of the .NET Framework that underpins it. We'll follow the execution thread downwards, first to MSIL (Microsoft Intermediate Language) then down through just-in-time compilation into Machine Code before finally seeing the results executed at the hardware level. The aim of this deep-dive is to provide you with a much more rounded knowledge of the environment within which you code exists. As a managed language, it's best-practice to let the Framework deal with device interaction but you'll find the experience of taking the cover off once in a while a very rewarding one that will greatly enrich your appreciate of the C# language and the way in which in functions.

The authors provide clear examples and thorough explanations of every feature in the C language. They teach C vis-a-vis the UNIX operating system. A reference and tutorial to the C programming language. Annotation copyrighted by Book News, Inc., Portland, OR

A reference guide to the use of the security features available in Microsoft's .NET framework. Code samples and configuration techniques are explained. Sixteen chapters discuss user- and code-identity-based security, membership conditions and code groups, strong naming assemblies, hosting managed code, verification and validation, data transport integrity. Further chapters cover material specific to administration and development concerns. Annotation copyrighted by Book News, Inc., Portland, OR Advanced Windows Debugging