

**Practical Enterprise Software Development Techniques
Advanced .NET Debugging**

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 concurrent software. The final section covers many of the common system-wide architectural and process concerns of concurrent programming. This is the only book you'll need in order to learn the best practices and common patterns for programming with concurrency on Windows and .NET.

Provides information about Microsoft .NET and programming in the .NET Framework, covering topics including the evolution of the Common Language Runtime, application domains, security, and interoperability.

Advanced Programming in the UNIX Environment

Advanced CORBA® Programming with C++

Constructing and Debugging Manipulator Programs

Concurrent Programming on Windows

Improving the Design of Existing Code