Flex Bison Text Processing Tools English Edition

Computing Handbook
Implementing Programming Languages
Implementing Domain-Specific Languages with Xtext and Xtend
Big Data Management, Technologies, and Applications
Real World Haskell
Logic Programming and Nonmonotonic Reasoning
Interprocess Communications in Linux
flex & bison
Linux Kernel Programming
Flex & Bison
Compiler Design
The Definitive Guide to GCC
SynDEVS Co-Design Flow
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Parsing Techniques
Lex & Yacc
DataFlow Supercomputing Essentials
Programmer's Guide to Apache Thrift
qmail
The Definitive ANTLR 4 Reference
Modern Compiler Implementation in C
Linux in a Nutshell

All About Maude - A High-Performance Logical Framework
Compilers
Managing Projects with GNU Make
Engineering a Compiler
Handbook of Open Source Tools
Programming with GNU Software
flex & bison
Crafting Interpreters
Crafting a Compiler
Building Parsers with Java
Effective Flex and Bison
Big Data: Concepts, Methodologies, Tools, and Applications
Introduction to Compilers and Language Design
Implementing Domain-Specific Languages with Xtext and Xtend
Modern Compiler Design
A Practical Approach to Compiler Construction
BeOS

JOVANI FREY

Computing Handbook Pragmatic Bookshelf
Flex & Bison"O'Reilly Media, Inc."
Implementing Programming Languages Elsevier
This second edition of Grune and Jacobs' brilliant work presents new developments and discoveries that have been made in the field. Parsing, also referred to as syntax analysis,

has been and continues to be an essential part of computer science and linguistics. Parsing techniques have grown considerably in importance, both in computer science, ie. advanced compilers often use general CF parsers, and computational linguistics where such parsers are the only option. They are used in a variety of software products including Web browsers, interpreters in computer devices, and data compression programs; and they are used extensively in linguistics.

Implementing Domain-Specific Languages with Xtext and Xtend

Packt Publishing Ltd

Programmers run into parsing problems all the time. Whether it's a data format like JSON, a network protocol like SMTP, a server configuration file for Apache, a PostScript/PDF file, or a simple spreadsheet macro language--ANTLR v4 and this book will demystify the process. ANTLR v4 has been rewritten from scratch to make it easier than ever to build parsers and the language applications built on top. This completely rewritten new edition of the bestselling Definitive ANTLR Reference shows you how to take advantage of these new features. Build your own languages with ANTLR v4, using ANTLR's new advanced parsing technology. In this book, you'll learn how ANTLR automatically builds a data structure representing the input

(parse tree) and generates code that can walk the tree (visitor). You can use that combination to implement data readers, language interpreters, and translators. You'll start by learning how to identify grammar patterns in language reference manuals and then slowly start building increasingly complex grammars. Next, you'll build applications based upon those grammars by walking the automatically generated parse trees. Then you'll tackle some nasty language problems by parsing files containing more than one language (such as XML, Java, and Javadoc). You'll also see how to take absolute control over parsing by embedding Java actions into the grammar. You'll learn directly from well-known parsing expert Terence Parr, the ANTLR creator and project lead. You'll master ANTLR grammar construction and learn how to build language tools using the built-in parse tree visitor mechanism. The book teaches using real-world examples and shows you how to use ANTLR to build such things as a data file reader, a JSON to XML translator, an R parser, and a Java class->interface extractor. This book is your ticket to becoming a parsing guru! What You Need: ANTLR 4.0 and above. Java development tools. Ant build system optional(needed for building ANTLR from source)

Big Data Management, Technologies, and Applications Lulu.com CD-ROM contains: Examples from text -- Parser toolkit -- Example programs.
Real World Haskell Springer Science & Business Media Over the last few years, Linux has grown both as an operating system and a tool for personal and business use. Simultaneously becoming more user friendly and more powerful as a back-end system, Linux has achieved new plateaus: the newer filesystems have solidified, new commands and tools have appeared and become standard, and the desktop--including new desktop environments--have proved to be viable, stable, and readily accessible to even those who don't consider themselves computer gurus. Whether you're using Linux for personal software projects, for a small office or home office (often termed the SOHO environment), to provide services to a small group of colleagues, or to administer a site responsible for millions of email and web connections each day, you need quick access to information on a wide range of tools. This book covers all aspects of administering and making effective use of Linux systems. Among its topics are booting, package management, and revision control. But foremost in Linux in a Nutshell are the utilities and commands that make Linux one of

the most powerful and flexible systems available. Now in its fifth edition, Linux in a Nutshell brings users up-to-date with the current state of Linux. Considered by many to be the most complete and authoritative command reference for Linux available, the book covers all substantial user, programming, administration, and networking commands for the most common Linux distributions. Comprehensive but concise, the fifth edition has been updated to cover new features of major Linux distributions. Configuration information for the rapidly growing commercial network services and community update services is one of the subjects covered for the first time. But that's just the beginning. The book covers editors, shells, and LILO and GRUB boot options. There's also coverage of Apache, Samba, Postfix, sendmail, CVS, Subversion, Emacs, vi, sed, gawk, and much more. Everything that system administrators, developers, and power users need to know about Linux is referenced here, and they will turn to this book again and again.

Logic Programming and Nonmonotonic Reasoning Springer Science & Business Media

If you need to parse or process text data in Linux or Unix, this useful book explains how to use flex and bison to solve your problems quickly. flex

& bison is the long-awaited sequel to the classic O'Reilly book, lex & yacc. In the nearly two decades since the original book was published, the flex and bison utilities have proven to be more reliable and more powerful than the original Unix tools. flex & bison covers the same core functionality vital to Linux and Unix program development, along with several important new topics. You'll find revised tutorials for novices and references for advanced users, as well as an explanation of each utility's basic usage and simple, standalone applications you can create with them. With flex & bison, you'll discover the wide range of uses these flexible tools offer.

Address syntax crunching that regular expressions tools can't handle Build compilers and interpreters, and handle a wide range of text processing functions Interpret code, configuration files, or any other structured format Learn key programming techniques, including abstract syntax trees and symbol tables Implement a full SQL grammar-with complete sample code Use new features such as pure (reentrant) lexers and parsers, powerful GLR parsers, and interfaces to C++

Interprocess Communications in Linux Benjamin-Cummings Publishing Company

While the BeOS is a fundamentally new operating system,

under the hood it contains a lot of UNIX-like features, and aims to be largely POSIX compliant. This book explores the BeOS from a POSIX programmer's vantage point, providing the programmer a comprehensive guide to getting these applications to run on this new platform.
flex & bison "O'Reilly Media, Inc."
"Modern Compiler Design" makes the topic of compiler design more accessible by focusing on principles and techniques of wide application. By carefully distinguishing between the essential (material that has a high chance of being useful) and the incidental (material that will be of benefit only in exceptional cases) much useful information was packed in this comprehensive volume. The student who has finished this book can expect to understand the workings of and add to a language processor for each of the modern paradigms, and be able to read the literature on how to proceed. The first provides a firm basis, the second potential for growth.
Manning Publications
Summary
Programmer's Guide to Apache Thrift provides comprehensive coverage of the Apache Thrift framework along with a developer's-eye view of modern distributed application architecture. Foreword by Jens Geyer. Purchase of the print book includes a free

eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Thrift-based distributed software systems are built out of communicating components that use different languages, protocols, and message types. Sitting between them is Thrift, which handles data serialization, transport, and service implementation. Thrift supports many client and server environments and a host of languages ranging from PHP to JavaScript, and from C++ to Go. About the Book Programmer's Guide to Apache Thrift provides comprehensive coverage of distributed application communication using the Thrift framework. Packed with code examples and useful insight, this book presents best practices for multi-language distributed development. You'll take a guided tour through transports, protocols, IDL, and servers as you explore programs in C++, Java, and Python. You'll also learn how to work with platforms ranging from browser-based clients to enterprise servers. What's inside Complete coverage of Thrift's IDL Building and serializing complex user-defined types Plug-in protocols, transports, and data compression Creating cross-language services with RPC and messaging systems About the Reader Readers should be comfortable with a language like Python, Java, or C++ and the

basics of service-oriented or microservice architectures. About the Author Randy Abernethy is an Apache Thrift Project Management Committee member and a partner at RX-M. Table of Contents PART 1 - APACHE THRIFT OVERVIEW Introduction to Apache Thrift Apache Thrift architecture Building, testing, and debugging PART 2 - PROGRAMMING APACHE THRIFT Moving bytes with transports Serializing data with protocols Apache Thrift IDL User-defined types Implementing services Handling exceptions Servers PART 3 - APACHE THRIFT LANGUAGES Building clients and servers with C++ Building clients and servers with Java Building C# clients and servers with .NET Core and Windows Building Node.js clients and servers Apache Thrift and JavaScript Scripting Apache Thrift Thrift in the enterprise

Linux Kernel Programming

WCB/McGraw-Hill

Despite using them every day, most software engineers know little about how programming languages are designed and implemented. For many, their only experience with that corner of computer science was a terrifying "compilers" class that they suffered through in undergrad and tried to blot from their memory as soon as they had scribbled their last NFA to DFA conversion on the final

exam. That fearsome reputation belies a field that is rich with useful techniques and not so difficult as some of its practitioners might have you believe. A better understanding of how programming languages are built will make you a stronger software engineer and teach you concepts and data structures you'll use the rest of your coding days. You might even have fun. This book teaches you everything you need to know to implement a full-featured, efficient scripting language. You'll learn both high-level concepts around parsing and semantics and gritty details like bytecode representation and garbage collection. Your brain will light up with new ideas, and your hands will get dirty and calloused. Starting from main(), you will build a language that features rich syntax, dynamic typing, garbage collection, lexical scope, first-class functions, closures, classes, and inheritance. All packed into a few thousand lines of clean, fast code that you thoroughly understand because you wrote each one yourself.

Flex & Bison CRC Press If you need to parse or process text data in Linux or Unix, this useful book explains how to use flex and bison to solve your problems quickly. flex & bison is the long-awaited sequel to the classic O'Reilly book, lex & yacc. In the nearly two decades since the original book was published, the flex

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Compiler Design

"O'Reilly Media, Inc." With a nontrivial learning curve on GNU Flex and Bison, most programmers are content to stop twiddling with their grammars as soon as they empirically work. However, like any other tools, there are better and worse ways to use them. "Effective Flex & Bison" is a

collection of best practices to fine-tune your parsers for speed, maintainability, and robustness.

The Definitive Guide to GCC Genever Benning

The utility simply known as make is one of the most enduring features of both Unix and other operating systems. First invented in the 1970s, make still turns up to this day as the central engine in most programming projects; it even builds the Linux kernel. In the third edition of the classic Managing Projects with GNU make, readers will learn why this utility continues to hold its top position in project build software, despite many younger competitors.The premise behind make is simple: after you change source files and want to rebuild your program or other output files, make checks timestamps to see what has changed and rebuilds just what you need, without wasting time rebuilding other files. But on top of this simple principle, make layers a rich collection of options that lets you manipulate multiple directories, build different versions of programs for different platforms, and customize your builds in other ways.This edition focuses on the GNU version of make, which has deservedly become the industry standard. GNU make contains powerful extensions that are explored in this book. It is also popular because it is free software and provides a version for almost every platform,

including a version for Microsoft Windows as part of the free Cygwin project. Managing Projects with GNU make, 3rd Edition provides guidelines on meeting the needs of large, modern projects. Also added are a number of interesting advanced topics such as portability, parallelism, and use with Java.Robert Mecklenburg, author of the third edition, has used make for decades with a variety of platforms and languages. In this book he zealously lays forth how to get your builds to be as efficient as possible, reduce maintenance, avoid errors, and thoroughly understand what make is doing. Chapters on C++ and Java provide makefile entries optimized for projects in those languages. The author even includes a discussion of the makefile used to build the book.

SynDEVS Co-Design Flow Prentice Hall Professional

This entirely revised second edition of Engineering a Compiler is full of technical updates and new material covering the latest developments in compiler technology. In this comprehensive text you will learn important techniques for constructing a modern compiler. Leading educators and researchers Keith Cooper and Linda Torczon combine basic principles with pragmatic insights from their experience building state-of-the-art compilers. They will help you fully understand important

techniques such as compilation of imperative and object-oriented languages, construction of static single assignment forms, instruction scheduling, and graph-coloring register allocation. In-depth treatment of algorithms and techniques used in the front end of a modern compiler Focus on code optimization and code generation, the primary areas of recent research and development Improvements in presentation including conceptual overviews for each chapter, summaries and review questions for sections, and prominent placement of definitions for new terms Examples drawn from several different programming languages Foundations of Programming Languages IGI Global Here is a complete package for programmers who are new to UNIX or who would like to make better use of the system. The book provides an introduction to all the tools needed for a C programmer. The CD contains sources and binaries for the most popular GNU tools, including their C/C++ compiler. *Parsing Techniques* O'Reilly Media This informative text/reference highlights the potential of DataFlow computing in research requiring high speeds, low power requirements, and high precision, while also benefiting from a reduction in the size of

the equipment. The cutting-edge research and implementation case studies provided in this book will help the reader to develop their practical understanding of the advantages and unique features of this methodology. This work serves as a companion title to DataFlow Supercomputing Essentials: Algorithms, Applications and Implementations, which reviews the key algorithms in this area, and provides useful examples. Topics and features: reviews the library of tools, applications, and source code available to support DataFlow programming; discusses the enhancements to DataFlow computing yielded by small hardware changes, different compilation techniques, debugging, and optimizing tools; examines when a DataFlow architecture is best applied, and for which types of calculation; describes how converting applications to a DataFlow representation can result in an acceleration in performance, while reducing the power consumption; explains how to implement a DataFlow application on Maxeler hardware architecture, with links to a video tutorial series available online. This enlightening volume will be of great interest to all researchers investigating supercomputing in general, and DataFlow computing in

particular. Advanced undergraduate and graduate students involved in courses on Data Mining, Microprocessor Systems, and VLSI Systems, will also find the book to be a helpful reference.

Lex & Yacc "O'Reilly Media, Inc."

Maude is a language and system based on rewriting logic. In this comprehensive account, you'll discover how Maude and its formal tool environment can be used in three mutually reinforcing ways: as a declarative programming language, as an executable formal specification language, and as a formal verification system. Examples used throughout the book illustrate key concepts, features, and the many practical uses of Maude.

DataFlow Supercomputing Essentials "O'Reilly Media, Inc."

This new, expanded textbook describes all phases of a modern compiler: lexical analysis, parsing, abstract syntax, semantic actions, intermediate representations, instruction selection via tree matching, dataflow analysis, graph-coloring register allocation, and runtime systems. It includes good coverage of current techniques in code generation and register allocation, as well as functional and object-oriented languages, that are missing from most books. In addition, more advanced

chapters are now included so that it can be used as the basis for a two-semester or graduate course. The most accepted and successful techniques are described in a concise way, rather than as an exhaustive catalog of every possible variant. Detailed descriptions of the interfaces between modules of a compiler are illustrated with actual C header files. The first part of the book, Fundamentals of Compilation, is suitable for a one-semester first course in compiler design. The second part, Advanced Topics, which includes the advanced chapters, covers the compilation of object-oriented and functional languages, garbage collection, loop optimizations, SSA form, loop scheduling, and optimization for cache-memory hierarchies.

Programmer's Guide to Apache Thrift

Cambridge University Press

Implementing a programming language means bridging the gap from the programmer's high-level thinking to the machine's zeros and ones. If this is done in an efficient and reliable way, programmers can concentrate on the actual problems they have to solve, rather than on the details of machines. But understanding the whole chain from languages to machines is still an essential part of the training of any serious programmer. It will result in a more competent programmer, who will moreover be able to

develop new languages. A new language is often the best way to solve a problem, and less difficult than it may sound. This book follows a theory-based practical approach, where theoretical models serve as blueprint for actual coding. The reader is guided to build compilers and interpreters in a well-understood and scalable way. The solutions are moreover portable to different implementation languages. Much of the actual code is automatically generated from a grammar of the language, by using the BNF Converter tool. The rest can be written in Haskell or Java, for which the book gives detailed guidance, but with some adaptation also in C, C++, C#, or OCaml, which are supported by the BNF Converter. The main focus of the book is on standard imperative and functional languages: a subset of C++ and a subset of Haskell are the source languages, and Java Virtual Machine is the main target. Simple Intel x86 native code compilation is shown to complete the chain from language to machine. The last chapter leaves the standard paths and explores the space of language design ranging from minimal Turing-complete languages to human-computer interaction in natural language.
qmail Springer Science & Business Media
A guide to language implementation covers

such topics as data readers, model-driven code generators, source-to-source translators, and source analyzers.