# Application Programming And File Processing In Cobol Concepts Techniques And Applications

Discover interesting recipes to help you understand the concepts of object detection, image processing, and facial detection Key Features Explore the latest features and APIs in OpenCV 4 and build computer vision algorithms Develop effective, robust, and fail-safe vision for your applications Build computer vision algorithms with machine learning capabilities Book Description OpenCV is an image and video processing library used for all types of image and video analysis. Throughout the book, you'll work through recipes that implement a variety of tasks, such as facial recognition and detection. With 70 self-contained tutorials, this book examines common pain points and best practices for computer vision (CV) developers. Each recipe addresses a specific problem and offers a proven, best-practice solution with insights into how it works, so that you can copy the code and configuration files and modify them to suit your needs. This book begins by setting up OpenCV, and explains how to manipulate pixels. You'll understand how you can process images with classes and count pixels with histograms. You'll also learn detecting, describing, and matching interest points. As you advance through the chapters, you'll get to grips with estimating projective relations in images, reconstructing 3D scenes, processing video sequences, and tracking visual motion. In the final chapters, you'll cover deep learning concepts such as face and object detection. By the end of the book, you'll be able to confidently implement a range to computer vision algorithms to meet the technical requirements of your complex CV projects What you will learn Install and create a program using the OpenCV library Segment images into homogenous regions and extract meaningful objects Apply image filters to enhance image content Exploit image geometry to relay different views of a pictured scene Calibrate the camera from different image observations Detect people and objects in images using machine learning techniques Reconstruct a 3D scene from images Explore face detection using deep learning Who this book is for If you’re a CV developer or professional who already uses or would like to use OpenCV for building computer vision software, this book is for you. You’ll also find this book useful if you’re a C++ programmer looking to extend your computer vision skillset by learning OpenCV.

This four volume set LNCS 9528, 9529, 9530 and 9531 constitutes the refereed proceedings of the 15th International Conference on Algorithms and Architectures for Parallel Processing, ICA3PP 2015, held in Zhangjiajie, China, in November 2015. The 219 revised full papers presented together with 77 workshop papers in these four volumes were carefully reviewed and selected from 807 submissions (602 full papers and 205 workshop papers). The first volume comprises the following topics: parallel and distributed architectures; distributed and network-based computing and internet of things and cyber-physical-social computing. The second volume comprises topics such as big data and its applications and parallel and distributed algorithms. The topics of the third volume are: applications of parallel and distributed computing and service dependability and security in distributed and parallel systems. The covered topics of the fourth volume are: software systems and programming models and performance modeling and evaluation.

Shows the audit of computerized accounting systems as part of the audit of the financial statements. Covers the control risk assessment procedures that the auditor performs on computerized systems in meeting objective relating to the audit financial statements.

Computer graphics is no longer merely a technique of promise. The case studies in this book prove that it is a technique which has already identified itself with progress in an astonishingly wide range of app lications, to the extent that it has been necessary to group many chapters into sections dealing with specific categories, such as the design of electrical circuits, civil engineering, architecture, nuclear and space science and text editing. In the last couple of years, computer graphics has blossomed out from the stage in which it was confined almost exclusively to the large scale industries of aircraft and automobile engineering. It has also developed additional advantages, mote than the simple idea of doing the same thing more quickly. Now the technique offers entirely new ways of doing old things, with consequent greater efficiency and accuracy; and it also brings a way of doing new things, which were previously not possible. In the introduction to their paper in Part 12, Armit and Forrest state: "We do not discuss those systems which are merely computer versions of existing design methods, but rather those systems which make use of techniques for design which are beyond the possibilities of conventional drafting." Similarly, Ranaweer3; and Leckie end their paper in Part 4 with the comment: "Thus the man and the machine can work as a team to arrive at a solution better than that which can be arrived at by either one alone".

CICS is an application server that delivers industrial-strength, online transaction management for critical enterprise applications. Proven in the market for over 30 years with many of the world's leading businesses, CICS enables today's customers to modernize and extend their applications to take advantage of the opportunities provided by e-business while maximizing the benefits of their existing investments.Designing and Programming CICS Applications will benefit a diverse audience. It introduces new users of IBM's mainframe (OS/390) to CICS features. It shows experienced users how to integrate existing mainframe systems with newer technologies, including the Web, CORBA, Java, CICS clients, and Visual Basic; as well as how to link MQSeries and CICS.Each part of Designing and Programming CICS Applications addresses the design requirements for specific components and gives a step-by-step approach to developing a simple application. The book reviews the basic concepts of a business application and the way CICS meets these requirements. It then covers a wide range of application development technologies, including VisualAge for Java, WebSphere Studio, and Visual Basic. Users learn not only how to design and write their programs but also how to deploy their applications.Designing and Programming CICS Applications shows how to: Develop and modify existing COBOL applications Become familiar with the CICS Java environment and write a simple Java wrapper for a COBOL application Develop a web front end using servlets, JSP and JavaBeans. Link the web front end to an existing COBOL application using CORBA Write a Visual Basic application to develop a customer GUI Link an existing COBOL application using a CICS Client ECI call Develop a Java application using Swing as an MQSeries Client Use the MQSeries-CICS bridge to access an existing COBOL application Whether for working with thousands of terminals or for a client/server environment with workstations and LANs exploiting modern technology such as graphical interfaces or multimedia, Designing and Programming CICS Applications delivers the power to create, modernize and extend CICS applications.

Learn to use Oracle 9i to build dynamic, data-driven Web sites. Get step-by-step details on creating and deploying Web applications using PL/SQL, HTML, Java, XML, WML, Peri and PHP. This book covers everything users need to know to master Web application development in an Oracle environment - using PL/SQL.

This IBM® Redbooks® publication is one in a series of IBM books written specifically for the IBM System Blue Gene® supercomputer, Blue Gene/Q®, which is the third generation of massively parallel supercomputers from IBM in the Blue Gene series. This document provides an overview of the application development environment for the Blue Gene/Q system. It describes the requirements to develop applications on this high-performance supercomputer. This book explains the unique Blue Gene/Q programming environment. This book does not provide detailed descriptions of the technologies that are commonly used in the supercomputing industry, such as Message Passing Interface (MPI) and Open Multi-Processing (OpenMP). References to more detailed information about programming and technology are provided. This document assumes that readers have a strong background in high-performance computing (HPC) programming. The high-level programming languages that are used throughout this book are C/C++ and Fortran95. For more information about the Blue Gene/Q system, see "IBM Redbooks" on page 159.

Application Programming and File Processing in COBOLConcepts, Techniques, and ApplicationsD C Heath & CompanyOracle Database Programming with Visual Basic.NETConcepts, Designs, and

ImplementationsJohn Wiley & Sons
The highly praised book in communications networking from IEEE Press, now available in the Eastern Economy Edition.This is a non-mathematical introduction to Distributed Operating Systems explaining the fundamental concepts and design principles of this emerging technology. As a textbook for students and as a self-study text for systems managers and software engineers, this book provides a concise and an informal introduction to the subject.
For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.
Multicore Application Programming is a comprehensive, practical guide to high-performance multicore programming that any experienced developer can use. Author Darryl Gove covers the leanding approaches to parallelization on Windows, Linux, and Oracle Solaris. Through practical examples, he illuminates the challenges involved in writing applications that fully utilize multicore processors, helping you produce appllications that are functionally correct, offer superior performance, and scale well to eight cores, sixteen Cores, and beyond. The book reveals how specific hardware implementations impact application performance and shows how to avoid common pitfalls. Step by step, you'll write applications that can handle large numbers of parallel threads, and you'll master advanced parallelization techniques. Multicore Application Programming isn't wedded to a single approach or platform: It is for every experienced C programmer working with any contemporary multicore processor in any leading operating system environment.
This book places spatial data within the broader domain of information technology (IT) while providing a comprehensive and coherent explanation of the guiding principles, methods, implementation and operational management of spatial databases within the workplace. The text explains the key concepts, issues and processes of spatial data implementation and provides a holistic management perspective.
OpenCV 3 Computer Vision Application Programming Cookbook is appropriate for novice C++ programmers who want to learn how to use the OpenCV library to build computer vision applications. It is also suitable for professional software developers wishing to be introduced to the concepts of computer vision programming. It can also be used as a companion book in a university-level computer vision courses. It constitutes an excellent reference for graduate students and researchers in image processing and computer vision.
This book is based on the premise that knowledge of Information Technology (IT) is essential today for people in every walk of life and all types of profession. It is designed to impart a unified body of knowledge and practice in IT to its readers. Readers can apply this knowledge in innovative ways for various strategic advantages such as increasing productivity, improving quality of products and services, problem solving, decision making, and improving their own and others living standards. The textbook takes a practical approach to introduce the various components of IT to its readers. While doing so, it demonstrates how IT is being used in modern enterprises by various departments to carry out their activities with greater ease, speed, and accuracy than before. It also introduces several new business models and practices made possible due to IT that enterprises are now using for better profitability. In the process, the book provides to its readers a sound foundation of various components and aspects of IT. It also introduces to its readers several latest concepts and technologies in IT such as Wearable computers, Green computing, Cloud computing, Speech recognition and voice response systems, 4G and 5G networks, Big data analytics, Data science, Web 3.0, IPv6, 3D printing, Enterprise 2.0 organization, etc.
Offering comprehensive coverage of the convergence of real-time embedded systems scheduling, resource access control, software design and development, and high-level system modeling, analysis and verification Following an introductory overview, Dr. Wang delves into the specifics of hardware components, including processors, memory, I/O devices and architectures, communication structures, peripherals, and characteristics of real-time operating systems. Later chapters are dedicated to real-time task scheduling algorithms and resource access control policies, as well as priority-inversion control and deadlock avoidance. Concurrent system programming and POSIX programming for real-time systems are covered, as are finite state machines and Time Petri nets. Of special interest to software engineers will be the chapter devoted to model checking, in which the author discusses temporal logic and the NuSMV model checking tool, as well as a chapter treating real-time software design with UML. The final portion of the book explores practical issues of software reliability, aging, rejuvenation, security, safety, and power management. In addition, the book: Explains real-time embedded software modeling and design with finite state machines, Petri nets, and UML, and real-time constraints verification with the model checking tool, NuSMV Features real-world examples in finite state machines, model checking, real-time system design with UML, and more Covers embedded computer programing, designing for reliability, and designing for safety Explains how to make engineering trade-offs of power use and performance Investigates practical issues concerning software reliability, aging, rejuvenation, security, and power management Real-Time Embedded Systems is a valuable resource for those responsible for real-time and embedded software design, development, and management. It is also an excellent textbook for graduate courses in computer engineering, computer science, information technology, and software engineering on embedded and real-time software systems, and for undergraduate computer and software engineering courses.
Digital Computer Applications to Process Control presents the developments in the application of digital computers to the control of technical processes. This book discusses the control principles and includes as well direct feedback and feed forward control as monitoring and optimization of technical processes. Organized into five parts encompassing 77 chapters, this book begins with an overview of the two categories of microprocessor systems. This text then discusses the concept of a sensor controlled robot that adapts to any task, assures product quality, and eliminates machine tending labor. Other chapters consider the ergonomic adaptation of the human operator's working conditions to his abilities. This book discusses as well the self-tuning regulator for liquid level in the acetic acid evaporator and its actual performance in production. The final chapter deals with algebraic method for deadbeat control of multivariable linear time-invariant continuous systems. This book is a valuable resource for electrical and control engineers.

Oracle Database Programming with Visual Basic.NET Discover a detailed treatment of the practical considerations and applications of Oracle database programming with Visual Basic 2019 Oracle Database Programming with Visual Basic.NET: Concepts, Designs, and Implementations delivers a comprehensive exploration of the foundations of Oracle database programming using Visual Basic.NET. Using Visual Basic.NET 2019, Visual Studio.NET 2019, and Oracle 18c XE, the book introduces the Oracle database development system, Oracle SQL Developer and Modeler, and teaches readers how to implement a sample database solution. The distinguished author also demonstrates the use of dotConnect for Oracle to show readers how to create an effective connection to an Oracle 18c XE database. The current versions of the .NET framework, ASP.NET, and ASP.NET 4.7 are also explored and used to offer readers the most up to date web database programming techniques available today. The book provides practical example projects and detailed, line-by-line descriptions throughout to assist readers in the development of their database programming skill. Students will also benefit from the inclusion of: A thorough introduction to databases, including definitions, examples, descriptions of keys and relationships, and some database components in popular databases, like Access, SQL, and Oracle An exploration of ADO.NET, including its architecture and components, like the DataReader class, DataSet component, DataTable component, and the command and parameter classes A discussion of Language Integrated Query (LINQ), including its architecture and components, its relationship to objects, DataSet, Oracle, and Entities An explanation of how to access data in ASP.NET and ASP.NET Web Services with multiple real project examples. Perfect for college and university students taking courses related to database programming and applications, Oracle Database Programming with Visual Basic.NET will also earn a place in the libraries of programmers and software engineers seeking a comprehensive reference for database coding in Visual Basic.NET.

Solaris™ Application Programming is a comprehensive guide to optimizing the performance of applications running in your Solaris environment. From the fundamentals of system performance to using analysis and optimization tools to their fullest, this wide-ranging resource shows developers and software architects how to get the most from Solaris systems and applications. Whether you’re new to performance analysis and optimization or an experienced developer searching for the most efficient ways to solve performance issues, this practical guide gives you the background information, tips, and techniques for developing, optimizing, and debugging applications on Solaris. The text begins with a detailed overview of the components that affect system performance. This is followed by explanations of the many developer tools included with Solaris OS and the Sun Studio compiler, and then it takes you beyond the basics with practical, real-world examples. In addition, you will learn how to use the rich set of developer tools to identify performance problems, accurately interpret output from the tools, and choose the smartest, most efficient approach to correcting specific problems and achieving maximum system performance. Coverage includes A discussion of the chip multithreading (CMT) processors from Sun and how they change the way that developers need to think about performance A detailed introduction to the performance analysis and optimization tools included with the Solaris OS and Sun Studio compiler Practical examples for using the developer tools to their fullest, including informational tools, compilers, floating point optimizations, libraries and linking, performance profilers, and debuggers Guidelines for interpreting tool analysis output Optimization, including hardware performance counter metrics and source code optimizations Techniques for improving application performance using multiple processes, or multiple threads An overview of hardware and software components that affect system performance, including coverage of SPARC and x64 processors

Annotation This publication is devoted to programming models, languages, and tools for performance-oriented program development in commercial and scientific environments. The included papers have been written based on presentations given at the workshop PADDA 2001. The goal of the workshop was to identify common interests and techniques for performance-oriented program development in commercial and scientific environments. Distributed architectures currently dominate the field of highly parallel computing. Distributed architectures, based on Internet and mobile computing technologies, are important target architectures in the domain of commercial computing too. The papers in this publication come from the two areas: scientific computing and commercial computing.

With about 200,000 entries, StarBriefs Plus represents the most comprehensive and accurately validated collection of abbreviations, acronyms, contractions and symbols within astronomy, related space sciences and other related fields. As such, this invaluable reference source (and its companion volume, StarGuides Plus) should be on the reference shelf of every library, organization or individual with any interest in these areas. Besides astronomy and associated space sciences, related fields such as aeronautics, aeronomy, astronautics, atmospheric sciences, chemistry, communications, computer sciences, data processing, education, electronics, engineering, energetics, environment, geodesy, geophysics, information handling, management, mathematics, meteorology, optics, physics, remote sensing, and so on, are also covered when justified. Terms in common use and/or of general interest have also been included where appropriate.

This book constitutes the refereed proceedings of the IFIP TC 5 International Conference on Digital Product and Process Development Systems, NEW PROLAMAT 2013, held in Dresden, Germany, in October 2013. The conference succeeds the International Conference on Programming Languages for Machine Tools, PROLAMAT 2006, held in Shanghai, China in 2006. In order to demonstrate the new orientation toward IT innovations, the acronym PROLAMAT has been changed into NEW PROLAMAT and is now interpreted as Project Research on Leading-Edge Applications and Methods for Applied Technology. The 42 revised papers were carefully reviewed and selected for inclusion in the volume. They have been organized in the following topical sections: digital product and process development; additive manufacturing; quality management; standardization and knowledge management developments; and simulation of procedures and processes.

This IBM® Redbooks® publication is based on the book Introduction to the New Mainframe: z/OS Basics, SG24-6366, which was produced by the International Technical Support Organization (ITSO), Poughkeepsie Center. It provides students of information systems technology with the background knowledge and skills necessary to begin using the basic facilities of a mainframe computer. For optimal learning, students are assumed to have successfully completed an introductory course in computer system concepts, such as computer organization and architecture, operating systems, data management, or data communications. They should also have successfully completed courses in one or more programming languages, and be PC literate. This textbook can also be used as a prerequisite for courses in advanced topics, or for internships and special studies. It is not intended to be a complete text covering all aspects of mainframe operation. It is also not a reference book that discusses every feature and option of the mainframe facilities. Others who can benefit from this course include experienced data processing professionals who have worked with non-mainframe platforms, or who are familiar with some aspects of the mainframe but want to become knowledgeable with other facilities and benefits of the mainframe environment. As we go through this course, we suggest that the instructor alternate between text, lecture, discussions, and hands-on exercises. Many of the exercises are cumulative, and are designed to show the student how to design and implement the topic presented. The instructor-led discussions and hands-on exercises are an integral part of the course, and can include topics not covered in this textbook. In this course, we use simplified examples and focus mainly on basic system functions. Hands-on exercises are provided throughout the course to help students explore the mainframe style of computing. At the end of this course, you will be familiar with the following information: Basic concepts of the mainframe, including its usage and architecture Fundamentals of IBM z/VSE® (VSE), an IBM zTM Systems entry mainframe operating system (OS) An understanding of mainframe workloads and the major middleware applications in use on mainframes today The basis for subsequent course work in more advanced, specialized areas of z/VSE, such as system administration or application programming

Offers instructions on building applications for the Kindle Fire, covering such topics as configuring the Android manifest file, building an application framework, the testing phase, and publishing the finished product.

Shared Memory Application Programming presents the key concepts and applications of parallel programming, in an accessible and engaging style applicable to developers across many domains. Multithreaded programming is today a core technology, at the basis of all software development projects in any branch of applied computer science. This book guides readers to develop insights about threaded programming and introduces two popular platforms for multicore development: OpenMP and Intel Threading Building Blocks (TBB). Author Victor Alessandrini leverages his rich experience to explain each platform’s design strategies, analyzing the focus and strengths underlying their often complementary capabilities, as well as their interoperability. The book is divided into two parts: the first develops the essential concepts of thread management and synchronization, discussing the way they are implemented in native multithreading libraries (Windows threads, Pthreads) as well as in the modern C++11 threads standard. The second provides an in-depth discussion of TBB and OpenMP including the latest features in OpenMP 4.0 extensions to ensure readers’ skills are fully up to date. Focus progressively shifts from traditional thread parallelism to modern task parallelism deployed by modern programming environments. Several chapter include examples drawn from a variety of disciplines, including molecular dynamics and image processing, with full source code and a software library incorporating a number of utilities that readers can adapt into their own projects. Designed to introduce threading and multicore programming to teach modern coding strategies for developers in applied computing Leverages author Victor Alessandrini's rich experience to explain each platform’s design strategies, analyzing the focus and strengths underlying their often complementary capabilities, as well as their interoperability Includes complete, up-to-date discussions of OpenMP 4.0 and TBB Based on the author’s training sessions, including information on source code and software libraries which can be repurposed

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Get up to speed on the hottest opportunity in the application development arena App development for tablets is a booming business. Android tablets, including the popular Motorola Xoom, are gaining market share at breakneck speed, and this book can have even novice programmers creating great Android apps specifically for tablets quickly and easily. A little Java knowledge is helpful but not essential to get started creating apps. Android expert Donn Felker helps you get the Android environment up and running, use XML to create application menus, create an icon for your app, and submit your app to the Android Market. You'll also learn to create an SQLite database to run behind your app and how to allow users to tailor your app to their needs. Tablet application development is booming, and Android tablets, including the Samsung Galaxy Tab and Motorola Xoom, are rapidly gaining market share This easy-to-follow guide helps new and veteran programmers set up the Android tablet environment, work with Google's notification system, and design apps that take advantage of larger tablet screens Covers using XML to create application menus, creating an icon for your app, and submitting your app to the Android Market Demonstrates notifications, how to create an SQLite database to run behind an application, and how to set up your app so users can choose options that tailor the app to their individual needs If you want to break into the growing Android tablet application development market, look no further than Android Tablet Application Development For Dummies!

Software Application Development: A Visual C++, MFC, and STL Tutorial provides a detailed account of the software development process using Visual C++, MFC, and STL. It

covers everything from the design to the implementation of all software modules, resulting in a demonstration application prototype which may be used to efficiently represent mathematical equations, perform interactive and intuitive model-building, and conduct control engineering experiments. All computer code is included, allowing developers to extend and reuse the software modules for their own project work. The book’s tutorial-like approach empowers students and practitioners with the knowledge and skills required to perform disciplined, quality, real-world software engineering.