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For almost three decades, Roger Pressman's Software Engineering: A Practitioner's Approach has been the world's leading textbook in software engineering. The new eighth edition represents a major restructuring and update of previous editions, solidifying the book's position as the most comprehensive guide to this important subject. The

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eighth edition of Software Engineering: A Practitioner's Approach has been designed to consolidate and restructure the content introduced over the past two editions of the book. The chapter structure will return to a more linear presentation of software engineering topics with a direct emphasis on the major activities that are part of a generic software process. Content will focus on widely used software engineering methods and will de-emphasize or completely eliminate discussion of secondary methods, tools and techniques. The intent is to provide a more targeted, prescriptive,

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and focused approach, while attempting to maintain SEPA's reputation as a comprehensive guide to software engineering. The 39 chapters of the eighth edition are organized into five parts - Process, Modeling, Quality Management, Managing Software Projects, and Advanced Topics. The book has been revised and restructured to improve pedagogical flow and emphasize new and important software engineering processes and practices.

Object-Oriented Software Engineering: An Agile Unified Methodology by David Kung presents a step-

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by-step methodology that integrates modeling and design, UML, patterns, test-driven development, quality assurance, configuration management, and agile principles throughout the life cycle. The overall approach is casual and easy to follow, with many practical examples that show the theory at work. The author uses his experiences as well as real-world stories to help the reader understand software design principles, patterns, and other software engineering concepts. The book also provides stimulating exercises that go far beyond the type of question that can be answered by

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simply copying portions of the text.

This edition combines clear explanations of database theory and design with up-to-date coverage of models and real systems. It features excellent examples and access to Addison Wesley's database Web site that includes further teaching, tutorials and many useful student resources.

Data Structures and Other Objects Using Java is a gradual, "just-in-time" introduction to Data Structures for a CS2 course. Each chapter provides a review of the key aspects of object-oriented programming and a syntax review, giving students

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the foundation for understanding significant programming concepts. With this framework they are able to accomplish writing functional data structures by using a five-step method for working with data types; understanding the data type abstractly, writing a specification, using the data type, designing and implementing the data type, and analyzing the implementation. Students learn to think analytically about the efficiency and efficacy of design while gaining exposure to useful Java classes libraries.

Fundamentals of Web Development

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Modernes Software Engineering

The CIO's Guide to Risk

*Practical Software Development Using UML and
Java*

Understanding Operating Systems

UNDERSTANDING OPERATING SYSTEMS provides a basic understanding of operating systems theory, a comparison of the major operating systems in use, and a description of the technical and operational tradeoffs inherent in each. The effective two-part organization covers the theory of operating systems, their historical roots, and their conceptual basis

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(which does not change substantially), culminating with how these theories are applied in the specifics of five operating systems (which evolve constantly). The authors explain this technical subject in a not-so-technical manner, providing enough detail to illustrate the complexities of stand-alone and networked operating systems. UNDERSTANDING OPERATING SYSTEMS is written in a clear, conversational style with concrete examples and illustrations that readers easily grasp.

For one-semester courses in software engineering. Introduces software engineering

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techniques for developing software products and apps With Engineering Software Products, author Ian Sommerville takes a unique approach to teaching software engineering and focuses on the type of software products and apps that are familiar to students, rather than focusing on project-based techniques. Written in an informal style, this book focuses on software engineering techniques that are relevant for software product engineering. Topics covered include personas and scenarios, cloud-based software, microservices, security and privacy and DevOps. The text is designed for students

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taking their first course in software engineering with experience in programming using a modern programming language such as Java, Python or Ruby. The full text downloaded to your computer With eBooks you can: search for key concepts, words and phrases make highlights and notes as you study share your notes with friends eBooks are downloaded to your computer and accessible either offline through the Bookshelf (available as a free download), available online and also via the iPad and Android apps. Upon purchase, you'll gain instant access to this eBook. Time limit The

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Fundamentals of Web Development covers the broad range of topics required for modern web development (both client- and server-side) and is appropriate for students who have taken a CS1 course sequence. The book guides students through the creation of enterprise-quality websites using current development frameworks, its comprehensive coverage of a modern internet development platform; includes HTML5, CSS3, Javascript, and the LAMP stack

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(that is, Linux, Apache, MySQL, and PHP). Other important technologies covered include jQuery, XML, WordPress, Bootstrap, and a variety of third-party APIs that include Facebook, Twitter, and Google and Bing Maps. Coverage also includes the required ACM web development topics in a modern manner closely aligned with best practices in the real world; of web development. ; Teaching and Learning Experience Help students master the fundamentals of web development: ; A true grasp of web development requires an understanding of both the foundations of the web and current web development practices. Support

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learning outcomes in various teaching scenarios: This book allows instructors to chart their own unique way through the topics that make up contemporary web development. Using a systems approach, this book examines the major schools of philosophy of education; considers the relationship of education to major ideologies including Nationalism, Liberalism, Conservatism, and Marxism; and analyzes the impact of philosophy and ideology on educational theory and practice through the theories of Essentialism, Perennialism, Social Reconstruction, and Critical Theory. Previously published as

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Philosophical and Ideological Perspectives on Education, and as New Perspectives on Philosophy and Education, this new version follows the content and organizational framework of these earlier editions. For each chapter it includes definitions of terms; historical contributors and antecedents; a general discussion of the particular philosophy, ideology, or theory; and relationships and application to education, especially to schools, curriculum instruction, and to teachers and students. Introduction to Software Engineering (Custom Edition)

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Ajax

Walls and Mirrors

Software Requirements

Software Engineering: A Practitioner's
Approach

An introductory course in Software Engineering remains one of the hardest subjects to teach largely because of the wide range of topics the area encompasses. We have believed for some time that we often tend to teach too many concepts and topics in an introductory course resulting in shallow knowledge and little insight on the application of these concepts. And Software Engineering is finally about the application of concepts to efficiently

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engineer good software solutions. We believe that an introductory course in Software Engineering should focus on imparting to students the knowledge and skills that are needed to successfully execute a commercial project of a few person-months efforts while employing proper practices and techniques. It is worth pointing out that a vast majority of the projects executed in the industry today fall in this scope—executed by a small team over a few months. I also believe that by carefully selecting the concepts and topics, we can, in the course of a semester, achieve this. This is the motivation of this book. The goal of this book is to introduce to the students a limited number of concepts and practices which will

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achieve the following two objectives: Teach the student the skills needed to execute a smallish commercial project. Provide the students with the necessary conceptual background for undertaking advanced studies in software engineering, through courses or on their own. I have included in this book only those concepts that I believe are foundational and through which the two objectives mentioned above can be met. Advanced topics have been consciously left out. As executing a software project requires skills in two dimensions—engineering and project management, this book focuses on key tasks in these two dimensions and discusses concepts and techniques that can be applied to effectively execute

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these tasks. The book is organized in a simple manner, with one chapter for each of the key tasks in a project. For engineering, these tasks are requirements analysis and specification, architecture design, module-level design, coding and unit testing, and testing. For project management, the key tasks are project planning and project monitoring and control, but both are discussed together in one chapter on project planning as even monitoring has to be planned. In addition, the book contains one chapter that clearly defines the problem domain of Software Engineering and another Chapter that discusses the central concept of software process which integrates the different tasks executed in a

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project. Each chapter opens with some introduction and what the reader can expect to learn from the chapter. For the task covered in the chapter, the important concepts are first discussed, followed by a discussion of the output of the task, the desired quality properties of the output, and some practical methods and notations for performing the task. The explanations are supported by examples, and the key learnings are summarized in the end for the reader. This book describes in detail how ARIS methods model and identify business processes by means of the UML (Unified Modeling Language), leading to an information model that serves as the basis for a systematic and intelligent development of

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application systems. Multiple real-world examples using SAP R/3 illustrate aspects of business process modeling including methods of knowledge management, implementation of workflow systems and standard software solutions, and the deployment of ARIS methods.

While encouraging the use of modeling techniques for sizing, cost and schedule estimation, reliability, risk assessment, and real-time design, the authors emphasize the need to calibrate models with actual data. Explicit guidance is provided for virtually every task that a software engineer may be assigned, and realistic case studies and examples are used extensively to reinforce the topics presented.

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For courses in computer science and software engineering The Fundamental Practice of Software Engineering Software Engineering introduces students to the overwhelmingly important subject of software programming and development. In the past few years, computer systems have come to dominate not just our technological growth, but the foundations of our world's major industries. This text seeks to lay out the fundamental concepts of this huge and continually growing subject area in a clear and comprehensive manner. The Tenth Edition contains new information that highlights various technolo.

Value Pack

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Cryptography Decrypted

**Philosophical, Ideological, and Theoretical
Perspectives on Education**

Developer Testing

Software Engineering: Practical Approach Driven

Pearson's best selling title on software engineering has be thoroughly revised to highlight various technological updates of recent years, providing students with highly relevant and current information. Somerville's experience in system dependability and systems engineering guides the text through a traditional plan-based approach that incorporates some novel agile methods. The text

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strives to teach the innovators of tomorrow how to create software that will make our world a better, safer, and more advanced place to live.

How do successful agile teams deliver bug-free, maintainable software—iteration after iteration? The answer is: By seamlessly combining development and testing. On such teams, the developers write testable code that enables them to verify it using various types of automated tests. This approach keeps regressions at bay and prevents “testing crunches”—which otherwise may occur near the end of an iteration—from ever happening. Writing testable code, however, is often difficult, because it

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requires knowledge and skills that cut across multiple disciplines. In Developer Testing, leading test expert and mentor Alexander Tarlinder presents concise, focused guidance for making new and legacy code far more testable. Tarlinder helps you answer questions like: When have I tested this enough? How many tests do I need to write? What should my tests verify? You'll learn how to design for testability and utilize techniques like refactoring, dependency breaking, unit testing, data-driven testing, and test-driven development to achieve the highest possible confidence in your software. Through practical examples in Java, C#, Groovy, and

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Ruby, you'll discover what works—and what doesn't. You can quickly begin using Tarlinder's technology-agnostic insights with most languages and toolsets while not getting buried in specialist details. The author helps you adapt your current programming style for testability, make a testing mindset “second nature,” improve your code, and enrich your day-to-day experience as a software professional. With this guide, you will Understand the discipline and vocabulary of testing from the developer's standpoint Base developer tests on well-established testing techniques and best practices Recognize code constructs that impact testability Effectively

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name, organize, and execute unit tests Master the essentials of classic and “mockist-style” TDD Leverage test doubles with or without mocking frameworks Capture the benefits of programming by contract, even without runtime support for contracts Take control of dependencies between classes, components, layers, and tiers Handle combinatorial explosions of test cases, or scenarios requiring many similar tests Manage code duplication when it can't be eliminated Actively maintain and improve your test suites Perform more advanced tests at the integration, system, and end-to-end levels Develop an understanding for how the organizational context

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influences quality assurance Establish well-balanced and effective testing strategies suitable for agile teams

Publisher Fact Sheet A concise, hands-on approach to managing & improving the critical requirements process in software development.

In an age of globalization, widely distributed systems, and rapidly advancing technological change, IT professionals and their managers must understand that risk is ever present. The key to project success is to identify risk and subsequently deal with it. The CIO's Guide to Risk addresses the many faces of risk, whether it be in systems

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development, adoption of bleeding edge tech, the push for innovation, and even the march toward all things social media. Risk management planning, risk identification, qualitative and quantitative risk analysis, contingency planning, and risk monitoring and control are all addressed on a macro as well as micro level. The book begins with a big-picture view of analyzing technology trends to evaluate risk. It shows how to conceptualize trends, analyze their effect on infrastructure, develop metrics to measure success, and assess risk in adapting new technology. The book takes an in-depth look at project-related risks. It explains the fundamentals of

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project management and how project management relates to systems development and technology implementation. Techniques for analyzing project risk include brainstorming, the Delphi technique, assumption analysis, and decision analysis. Metrics to track and control project risks include the Balance Scorecard, project monitoring and reporting, and business and technology metrics. The book also takes an in-depth look at the role of knowledge management and innovation management in identifying, assessing, and managing risk. The book concludes with an executive's guide to the legal and privacy issues related to risk management, as well

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overviews of risks associated with social media and mobile environments. With its checklists, templates, and worksheets, the book is an indispensable reference on risk and information technology.

The Definitive Guide

Introduction to Program Design & Data Structures

Building Quality into Software

Object-Oriented Software Engineering: An Agile

Unified Methodology

Software Engineering GE.

Provides information on the basics of Ajax to create Web applications that function like desktop programs.

For one-semester courses in software engineering. Introduces

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software engineering techniques for developing software products and apps With Engineering Software Products, author Ian Sommerville takes a unique approach to teaching software engineering and focuses on the type of software products and apps that are familiar to students, rather than focusing on project-based techniques. Written in an informal style, this book focuses on software engineering techniques that are relevant for software product engineering. Topics covered include personas and scenarios, cloud-based software, microservices, security and privacy and DevOps. The text is designed for students taking their first course in software engineering with experience in programming using a modern programming language such as Java, Python or Ruby.

Intended for introductory and advanced courses in software

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engineering. The ninth edition of this best-selling introduction presents a broad perspective of software engineering, focusing on the processes and techniques fundamental to the creation of reliable, software systems. Increased coverage of agile methods and software reuse, along with coverage of 'traditional' plan-driven software engineering, gives readers the most up-to-date view of the field currently available. Practical case studies, a full set of easy-to-access supplements, and extensive web resources make teaching the course easier than ever. The book is now structured into four parts: 1: Introduction to Software Engineering 2: Dependability and Security 3: Advanced Software Engineering 4: Software Engineering Management.

For courses in computer science and software engineering The
Fundamental Practice of Software Engineering Software

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Engineering introduces students to the overwhelmingly important subject of software programming and development. In the past few years, computer systems have come to dominate not just our technological growth, but the foundations of our world ' s major industries. This text seeks to lay out the fundamental concepts of this huge and continually growing subject area in a clear and comprehensive manner. The 10th Edition contains new information that highlights various technological updates of recent years, providing students with highly relevant and current information. Sommerville ' s experience in system dependability and systems engineering guides the text through a traditional plan-based approach that incorporates some novel agile methods. The text strives to teach the innovators of tomorrow how to create software that will make our world a better, safer, and more advanced place to

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live. The full text downloaded to your computer With eBooks you can: search for key concepts, words and phrases make highlights and notes as you study share your notes with friends eBooks are downloaded to your computer and accessible either offline through the Bookshelf (available as a free download), available online and also via the iPad and Android apps. Upon purchase, you'll gain instant access to this eBook. Time limit The eBooks products do not have an expiry date. You will continue to access your digital ebook products whilst you have your Bookshelf installed.

SOFTWARE ENGINEERING.

Java Foundations

Software Engineering Fundamentals

Fundamentals of Database Systems

Software Engineering with Agile Software Development, Principles,

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Patterns and Practices

SOFTWARE ENGINEERING. Software Engineering, Global Edition Pearson Higher Ed

For almost four decades, Software Engineering: A Practitioner's Approach (SEPA) has been the world's leading textbook in software engineering. The ninth edition represents a major restructuring and update of previous editions, solidifying the book's position as the most comprehensive guide to this important subject.

Now updated for the latest release of Java, the Second Edition of Modern Software Development Using Java continues to blaze a new path for today's CS2 students.

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Tymann and Schneideri's contemporary approach focuses on what students need to learn in the CS2 course in order to appreciate what is truly important today in the areas of software design and development. This text covers such current software development ideas as object-oriented design, UML, data structure libraries, net-centric programming, threads, and GUIs, all presented in a way that is fully accessible and motivating. The new edition has been fully revised to take advantage of the new features in Java 5.0, and all material is Java 6.0 compliant.

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that

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may come packaged with the bound book. Intended for introductory and advanced courses in software engineering. The ninth edition of Software Engineering presents a broad perspective of software engineering, focusing on the processes and techniques fundamental to the creation of reliable, software systems. Increased coverage of agile methods and software reuse, along with coverage of 'traditional' plan-driven software engineering, gives readers the most up-to-date view of the field currently available. Practical case studies, a full set of easy-to-access supplements, and extensive web resources make teaching the course easier than ever. The book is now structured into

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*four parts: 1: Introduction to Software Engineering 2:
Dependability and Security 3: Advanced Software
Engineering 4: Software Engineering Management
Version 3.0*

A Practitioners Approach

Engineering Software Products

*Engineering Software Products: An Introduction to Modern
Software Engineering, eBook, Global Edition*

***This book covers the essential
knowledge and skills needed by a
student who is specializing in software***

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engineering. Readers will learn principles of object orientation, software development, software modeling, software design, requirements analysis, and testing. The use of the Unified Modelling Language to develop software is taught in depth. Many concepts are illustrated using complete examples, with code written in Java.

Multi pack contains: Software Engineering 7e (ISBN 0321210263) Agile Software Development (ISBN

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0135974445)

***Rev. ed. of: Data abstraction and
problem solving with Java / Frank M.
Carrano, Janet J. Prichard. 2007.***

***This book discusses a comprehensive
spectrum of software engineering
techniques and shows how they can be
applied in practical software projects.
This edition features updated chapters
on critical systems, project management
and software requirements.
Software Engineering, Global Edition***

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***Object-oriented Software Engineering
Data Abstraction & Problem Solving with
Java***

***Data Structures and Other Objects Using
Java***

***Entwurf und Entwicklung von
Softwareprodukten***

A clear, comprehensible, and practical guide to the essentials of computer cryptography, from Caesar's Cipher through modern-day public key. Cryptographic capabilities like detecting imposters and stopping eavesdropping are thoroughly illustrated with easy-to-understand analogies, visuals, and historical sidebars. The student needs little or no

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background in cryptography to read *Cryptography Decrypted*. Nor does it require technical or mathematical expertise. But for those with some understanding of the subject, this book is comprehensive enough to solidify knowledge of computer cryptography and challenge those who wish to explore the high-level math appendix.

Computer Architecture/Software Engineering

In the Guide to the Software Engineering Body of Knowledge (SWEBOK(R) Guide), the IEEE Computer Society establishes a baseline for the body of knowledge for the field of software engineering, and the work supports the Society's responsibility to promote the advancement of both theory and practice in this field. It should be noted that the Guide does not purport to define the body of knowledge but rather to

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serve as a compendium and guide to the knowledge that has been developing and evolving over the past four decades. Now in Version 3.0, the Guide's 15 knowledge areas summarize generally accepted topics and list references for detailed information. The editors for Version 3.0 of the SWEBOK(R) Guide are Pierre Bourque (Ecole de technologie superieure (ETS), Universite du Quebec) and Richard E. (Dick) Fairley (Software and Systems Engineering Associates (S2EA)).

This custom edition is published for the University of Southern Queensland.

Software Engineering

An Introduction to Modern Software Engineering

Software Engineering: For VTU, 8/e

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Modern Software Development Using Java
Guide to the Software Engineering Body of Knowledge
(Swebok(r))

Inspired by the success of their best-selling introductory programming text, Java Software Solutions, authors Lewis, DePasquale, and Chase now release Java Foundations, Second Edition. This text is a comprehensive resource for instructors who want a two-or three-semester introduction to programming textbook that includes detail on data structures topics. Java Foundations introduces a Software Methodology early on and revisits it

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throughout to ensure students develop sound program development skills from the beginning. Control structures are covered before writing classes, providing a solid foundation of fundamental concepts and sophisticated topics.

Software Engineering: Pearson New International Edition

Fundamentals of Software Engineering

Essentials of Software Engineering

ARIS – Business Process Modeling