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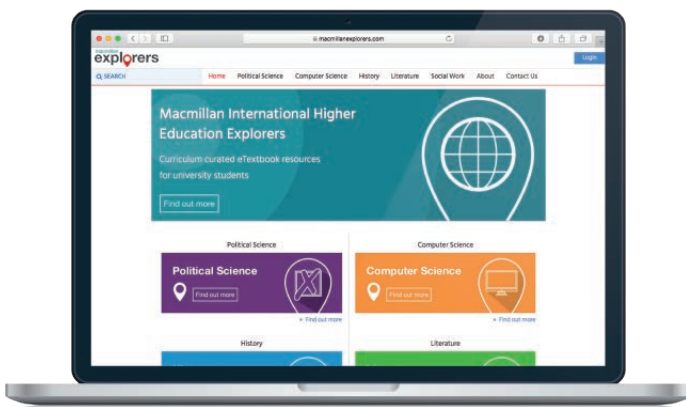
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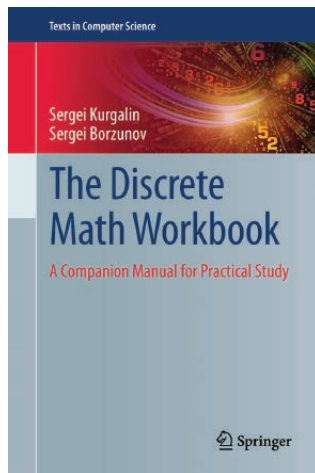
The Discrete Math Workbook

Authors: Sergei Kurgalin and Sergi Borzunov

Publication date: 2018

ISBN: 9783319926445

This textbook presents an accessible introduction to discrete mathematics through a collection of classroom-tested exercises. This hands-on study guide is designed for undergraduate students in computer science, informatics, and electronic engineering.

A hands-on, classroom-tested study guide suitable for laboratory practical training and teaching

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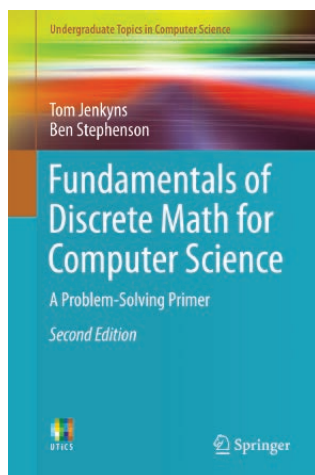
Fundamentals of Discrete Math for Computer Science: A Problem-Solving Primer

Authors: Tom Jenkyns and Ben Stephenson

Publication date: 2018

ISBN: 9783319701509

2nd edition

Discrete mathematics can be a challenging subject for undergraduates. Written by instructors in the field, this book provides an engaging and motivational introduction to discrete mathematics. The text encourages students to think critically, to be effective problem solvers, to integrate theory and practice, and to recognize the importance of abstraction.

An ideal introduction for undergraduates, written by teachers and designed for teaching

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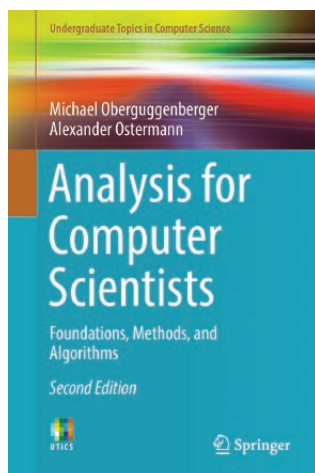
Analysis for Computer Scientists: Foundations, Methods, and Algorithms

Authors: Michael Oberguggenberger and Alexander Ostermann
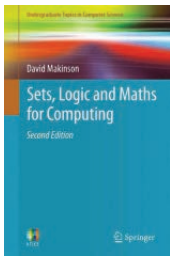
Publication date: 2018

**ISBN:** 9783319911540

2nd edition

This easy-to-follow textbook introduces the mathematical language, knowledge and problem-solving skills that undergraduates need to study computing. The language is in part qualitative, with concepts such as set, relation, function and recursion/induction; but it is also partly quantitative, with principles of counting and finite probability.

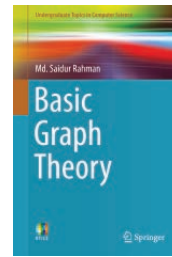Presents an algorithmic approach to analysis, focusing on modelling and applications

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Sets, Logic and Maths for Computing

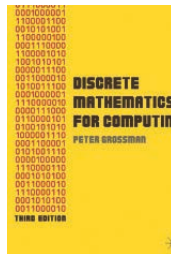**Author:** David Makinson

Publication date: 2012

ISBN: 9781447124993
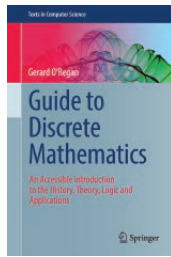
Guide to Discrete Mathematics

Author: Gerard O'Regan

Publication date: 2016
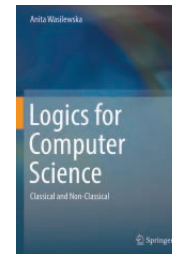
ISBN: 9783319445601

Basic Graph Theory

Author: Md. Saidur Rahman

Publication date: 2017

ISBN: 9783319494746
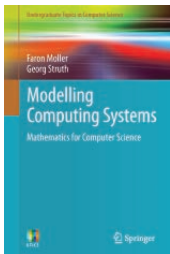
Modelling Computing Systems

Authors: Faron Moller and Georg Struth

Publication date: 2013

ISBN: 9781848003217

Discrete Mathematics for Computing

Author: Peter Grossman

Publication date: 2008
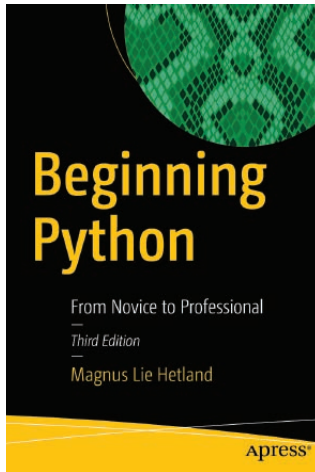
ISBN: 9780230216112

3rd edition

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Author: Anita Wasilewska

Publication date: 2018

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Programming

Beginning Python: From Novice to Professional

Author: Magnus Lie Hetland

Publication date: 2017

ISBN: 9781484200292

3rd edition

This practical guide covers an array of Python-related programming topics, including addressing language internals, database integration, network programming, and web services. Teach students to write code faster by learning how to take advantage of advanced features such as magic methods, exceptions, and abstraction.

Helps students become a proficient Python programmer

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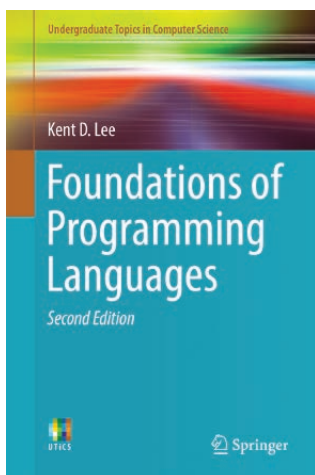
Foundations of Programming Languages

Author: Kent D. Lee

Publication date: 2017

ISBN: 9783319707891

2nd edition

This clearly written textbook provides an accessible introduction to the three programming paradigms of object-oriented/imperative, functional, and logic programming. Highly interactive in style, the text encourages learning through practice, offering test exercises for each topic covered.

Demonstrates how programming language concepts are used and how they're implemented

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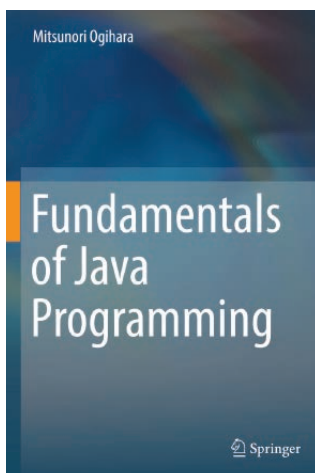
Fundamentals of Java Programming
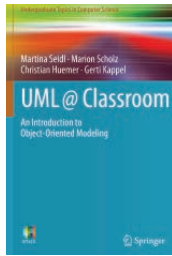
Author: Mitsunori Ogihara
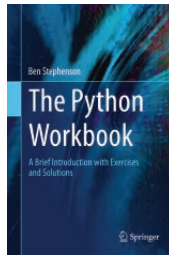
Publication date: 2018

ISBN: 9783319894904

Fundamentals of Java Programming teaches the skills needed to get started in Java programming. Building solid foundations in Java programming, this book includes more than 180 code examples and 250 exercises.

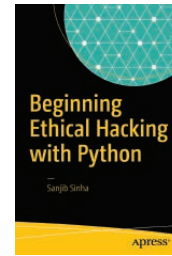Contains more than 180 code examples and 250 exercises

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UML @ Classroom

Authors: Martina Seidl, Marion Scholz, Christian Huerner and Gerti Kappel

Publication date: 2015

ISBN: 9783319127415

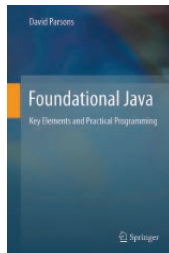## The Python Workbook

Author: Ben Stephenson

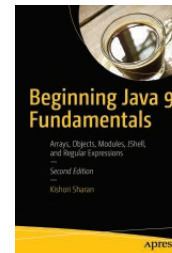**Publication date:** 2015

ISBN: 9783319142395

Beginning Ethical Hacking with Python

Author: Sanjib Sinha

Publication date: 2017

ISBN: 9781484225400
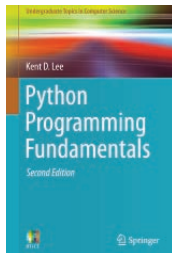
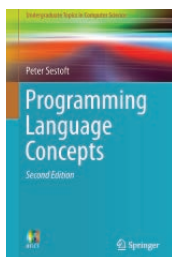## Python Programming Fundamentals

Author: Kent D. Lee

Publication date: 2015

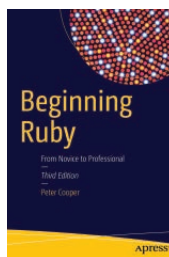**ISBN:** 9781447166412

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Foundational Java

Author: David Parsons

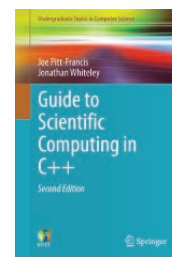**Publication date:** 2012

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Beginning Java 9 Fundamentals

Author: Kishori Sharan

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ISBN: 9781484228432
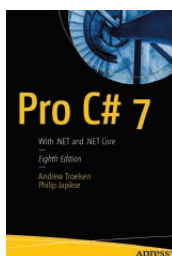
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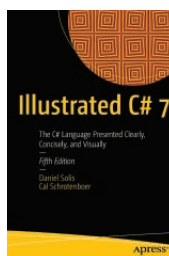**Publication date:** 2017

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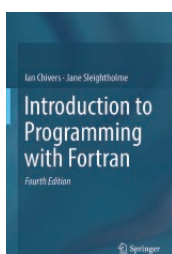**Publication date:** 2018

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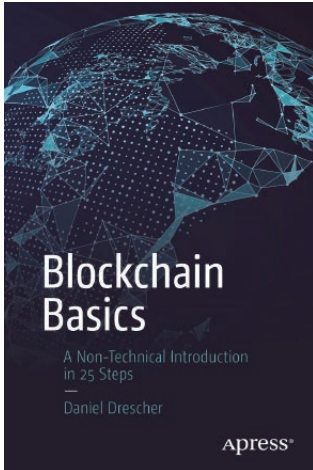
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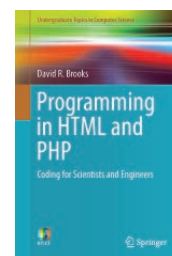
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Author: Daniel Drescher

Publication date: 2017

ISBN: 9781484226032

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Teaches core concepts and uses of blockchain technology without relying on complex formulas
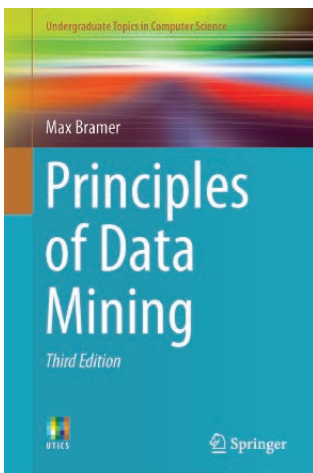
Principles of Data Mining

Author: Max Bramer

Publication date: 2016

ISBN: 9781447173069

3ⁿᵈ edition

Explaining the principal techniques of data mining, this book focuses on classification, association rule mining and clustering. It can be used for undergraduates across a range of disciplines from computer science to business studies.

Written for students without a strong background in mathematics or statistics
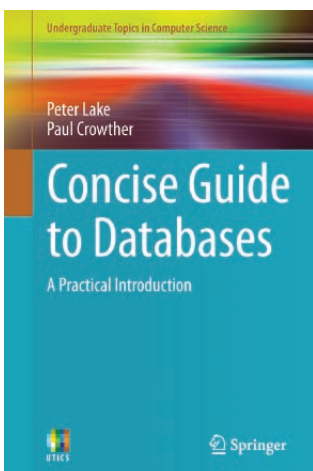
Concise Guide to Databases: A Practical Introduction

**Authors:** Peter Lake and Paul Crowther
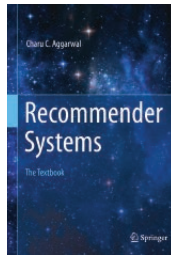
Publication date: 2013

ISBN: 9781447156000

This easy-to-read textbook presents a comprehensive introduction to databases. The book takes a wide view of database technology, encompassing big data, NoSQL, object and object-relational and in-memory databases.

Introduces a range of commercial databases and encourages the reader to experiment with them
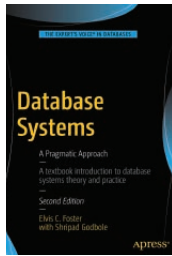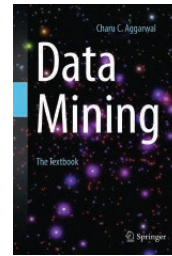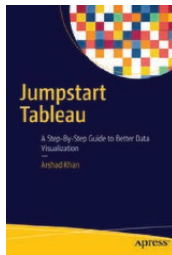
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Authors: Elvis Foster and Shripad Godbole

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Author: Charu C. Aggarwal

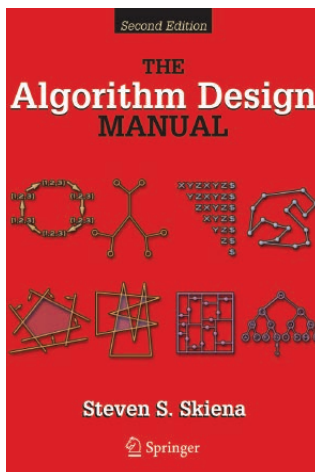**Publication date:** 2016

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Author: Charu C. Aggarwal

Publication date: 2015

ISBN: 9783319141411

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ISBN: 9781484219331
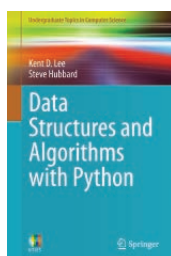
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Author: Steven Skiena

Publication date: 2008

ISBN: 9781848000698

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This bestselling classic takes the mystery out of designing algorithms. Expanding on the first edition and including twice the amount of tutorial material and exercises, the book is ideal for undergraduate algorithm design courses.

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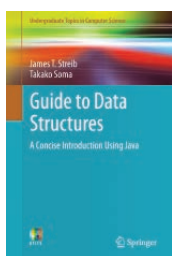
Guide to Data Structures
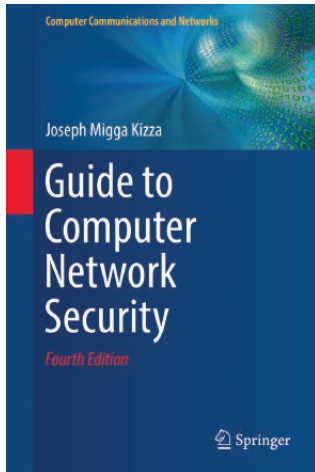
Authors: James T. Streib and Takako Soma

Publication date: 2018

ISBN: 9783319700830

Data Structures and Algorithms with Python

Authors: Kent D. Lee and Steve Hubbard

Publication date: 2015

ISBN: 9783319130712

Networking and Operating Systems

Guide to Computer Network Security

**Author:** Joseph Migga Kizza

Publication date: 2017

ISBN: 9783319556055

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This updated edition of the definitive book on computer network and security presents a comprehensive guide to the repertoire of security tools, algorithms and best practices mandated by the technology we depend on.

Includes exercises at the end of each chapter, as well as an entire chapter devoted to laboratory exercises
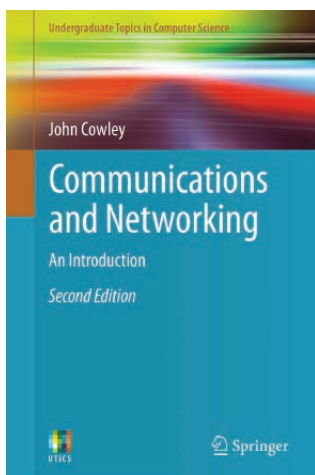
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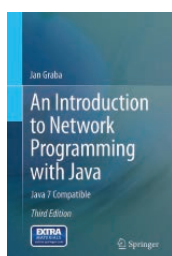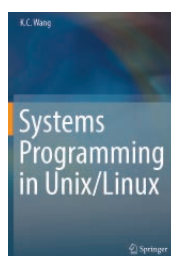
An Introduction to Network Programming with Java

Author: Jan Graba
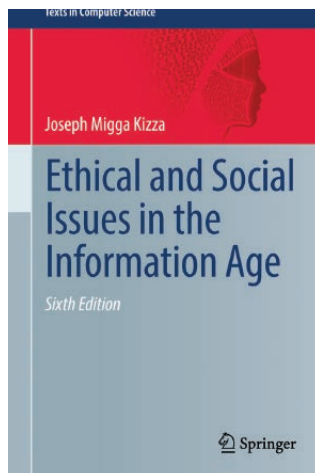
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Systems Programming in Unix/Linux

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Ethical and Social Issues

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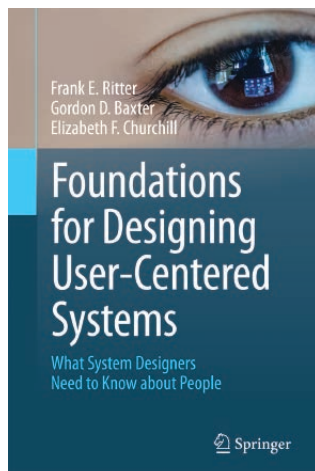
Publication date: 2017

ISBN: 9783319707112

6th edition

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Human Computer Interaction

## Foundations for Designing User-Centered Systems: What System Designers Need to Know about People

Authors: Frank Ritter, Gordon Baxter and Elizabeth Churchill

Publication date: 2014

ISBN: 9781447151333

What are the human capabilities and characteristics that influence how people use interactive technologies? Organized into four main areas (anthropometrics, behaviour, cognition and social factors), this book considers the practice of system design.

Contains exercises and examples to illustrate the application of concepts introduced within the text
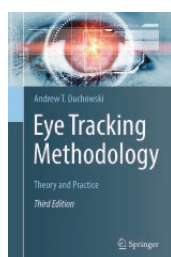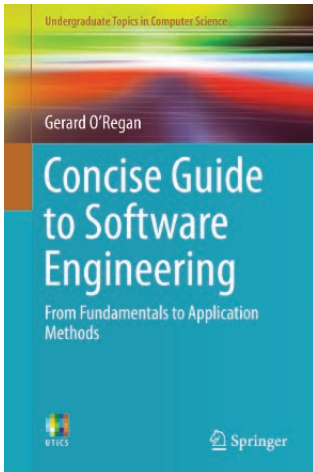
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Author: Andrew T. Duchowski

Publication date: 2017

ISBN: 9783319578811

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Concise Guide to Software Engineering: From Fundamentals to Application Methods
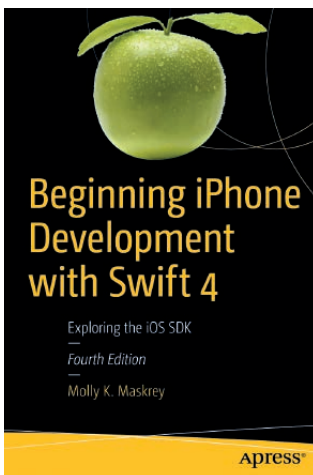
Author: Gerard O'Regan

Publication date: 2017

ISBN: 9783319577494

This essential textbook introduces the fundamental principles of software engineering, and presents practical guidance on how to apply the theory in a real-world, industrial environment.

Provides guidance on how to apply the theory learnt in the book in a real-world environment

Beginning iPhone Development with Swift 4: Exploring the iOS SDK

Author: Molly K. Maskrey

Publication date: 2017

ISBN: 9781484230718

4th edition

Accessible and easy-to-follow, this book offers a course in iPhone and iPad programming. Students will learn how to create, load and work with playgrounds as they develop an understanding of the Swift language.

Teaches your students how to optimize their code and deliver great user experiences
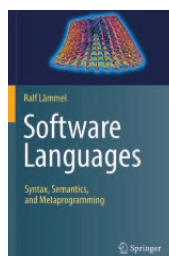
Beginning Android

Author: Grant Allen

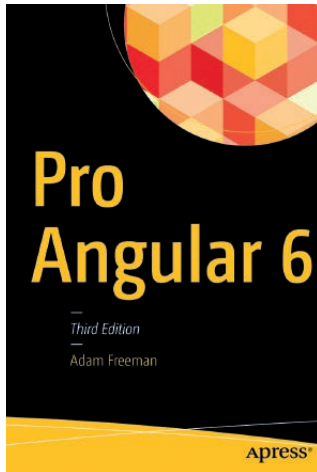**Publication date:** 2015

ISBN: 9781430246862

5th edition

Software Languages

Author: Ralf Lämmel

Publication date: 2018

ISBN: 9783319907987
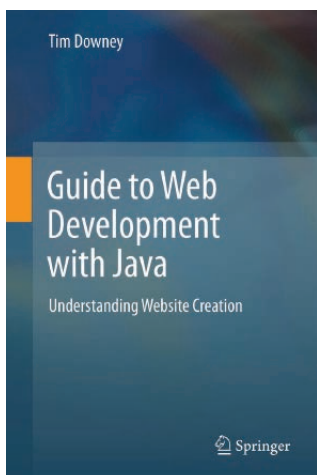
Web Development

Pro Angular 6

Author: Adam Freeman

Publication date: 2018

ISBN: 9781484236482

Best-selling author Adam Freeman shows students how to use Angular in their projects, starting from the nuts and bolts and building up to the most advanced and sophisticated features.

Teaches students to create rich and dynamic web apps using Angular 6

## Guide to Web Development with Java: Understanding Website Creation

Author: Tim Downey

Publication date: 2012

ISBN: 9781447124429

This textbook introduces readers to the three-tiered, Model-View-Controller (MVC) architecture by using Hibernate, JSPs, and Java Servlets. These all use Java so that a student with a background in programming will be able to master them with ease.

Contains questions and exercises at the end of each chapter and detailed illustrations throughout
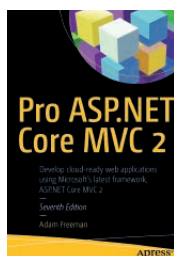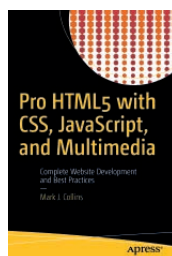
Pro ASP.NET Core MVC 2

Author: Adam Freeman

Publication date: 2017

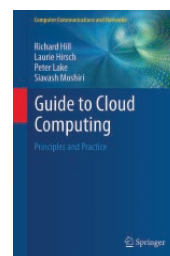**ISBN:** 9781484231494

7th **edition**

Pro HTML5 with CSS, JavaScript, and Multimedia

Author: Mark Collins

Publication date: 2017

ISBN: 9781484224625

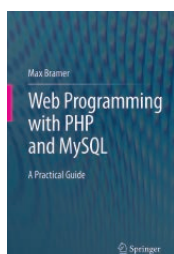## Guide to Cloud Computing

Authors: Richard Hill, Laurie Hirsch, Peter Lake and Slavash Moshiri
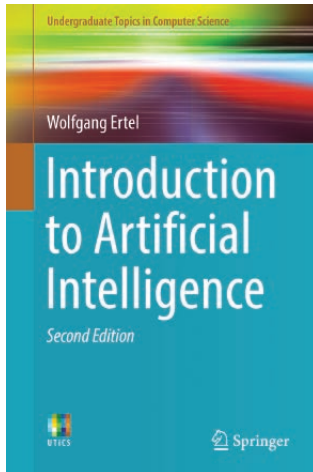
Publication date: 2012

ISBN: 9781447146025

Web Programming with PHP and MySQL

Author: Max Bramer

Publication date: 2015

ISBN: 9783319226583

Artificial Intelligence

Introduction to Artificial Intelligence

Author: Wolfgang Ertel

Publication date: 2018

ISBN: 9783319584867

2nd edition

Introduction to Artificial Intelligence is an accessible textbook introducing the exciting field of AI. Written with clarity, it's an essential introduction to the field for computer science undergraduates and students in other disciplines.

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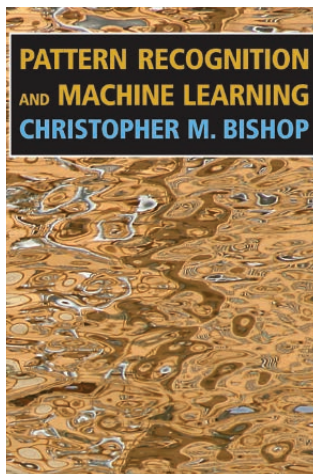
## Title: Pattern Recognition and Machine Learning

Author: Christopher M. Bishop

Publication date: 2006

ISBN: 9780387310732

This bestselling textbook provides surveys the fields of pattern recognition and machine learning. No previous knowledge of pattern recognition or machine learning concepts is needed, making it suitable for courses at undergraduate and postgraduate level.
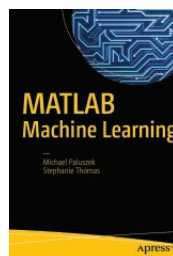
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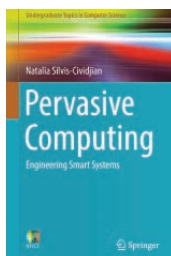
Pervasive Computing

Author: Natalia Silvis-Cividjian

Publication date: 2017
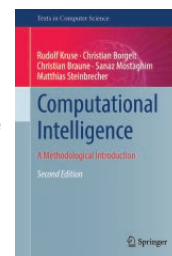
ISBN: 9783319516547

MATLAB Machine Learning

Authors: Michael Paluszek and Stephanie Thomas

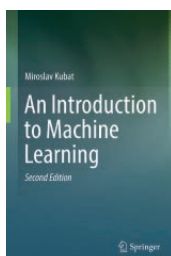**Publication date:** 2017

ISBN: 9781484222492

Computational Intelligence

Authors: Rudolf Kruse, Christian Borgelt, Christian Braune, Sanaz Mostaghim and Matthias Steinbrecher

Publication date: 2016
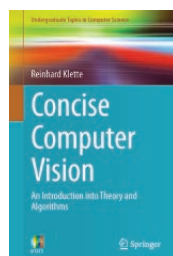
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An Introduction to Machine Learning

Author: Miroslav Kubat

Publication date: 2017

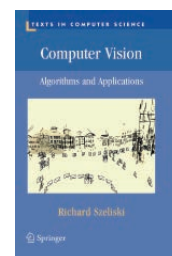**ISBN:** 9783319639123

2nd edition

Concise Computer Vision

Author: Reinhard Klette

Publication date: 2014
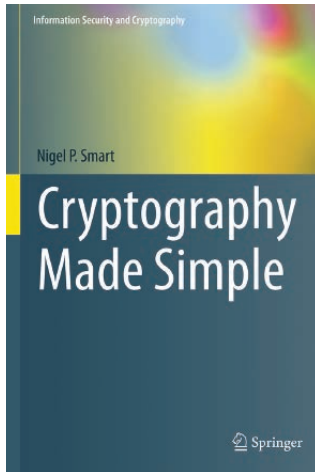
ISBN: 9781447163190

Computer Vision

Author: Richard Szeliski

Publication date: 2010

ISBN: 9781848829343

Cryptography and Security

Cryptography Made Simple

Author: Nigel Smart

Publication date: 2016

ISBN: 9783319219356

In this introductory textbook, the key topics in cryptography are explained. The author takes a modern approach, where defining what is meant by "secure" is as important as creating something that achieves that goal, and security definitions are central to the discussion throughout.

Author Nigel Smart is a leading researcher and practitioner in cryptography
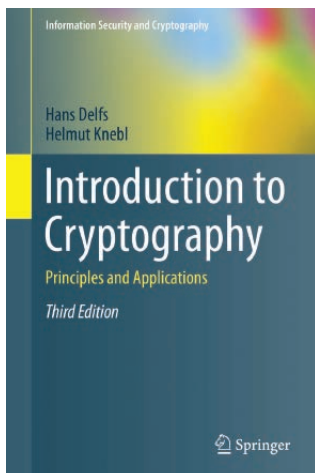
Introduction to Cryptography: Principles and Applications

Authors: Hans Delfs and Helmut Knebl

Publication date: 2015

ISBN: 9783662479735

3rd edition

This book covers the key concepts of cryptography on an undergraduate level, from encryption and digital signatures to cryptographic protocols. Essential techniques are demonstrated in protocols for key exchange, user identification, electronic elections and digital cash.

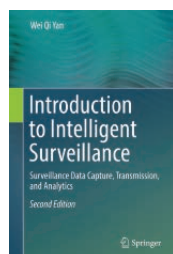The new edition of this textbook is ideal for computer science and engineering undergraduates

Enterprise Cybersecurity

Authors: Scott Donaldson, Stanley Siegel, Chris Williams and Abdul Aslam

Publication date: 2015
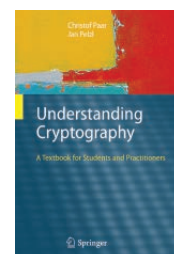
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Author: Wei Qi Yan

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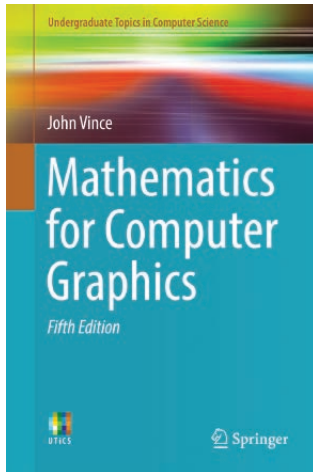
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Understanding Cryptography

Authors: Bart Preneel, Christof Paar and Jan Pelzl

Publication date: 2014

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## Mathematics for Computer Graphics

Author: John Vince

Publication date: 2017

ISBN: 9781447173342

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This book explains a wide range of mathematical techniques and problem-solving strategies associated with computer games, computer animation and other areas of computer graphics.

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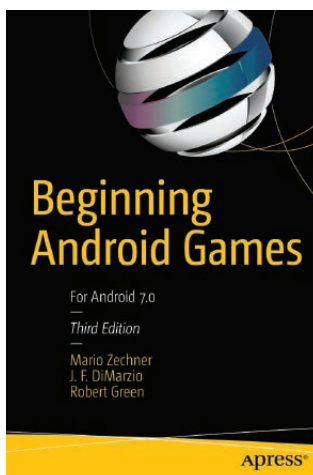
Beginning Android Games

Authors: Mario Zechner, J. F. DiMarzio and Robert Green

Publication date: 2016

ISBN: 9781484204733

3rd edition

Beginning Android Games will help kick-start your students' mobile gaming projects. This book guides the reader through the process of making several example game apps in Android.

Students will learn the fundamentals to create a complete 3D game over the course of the book
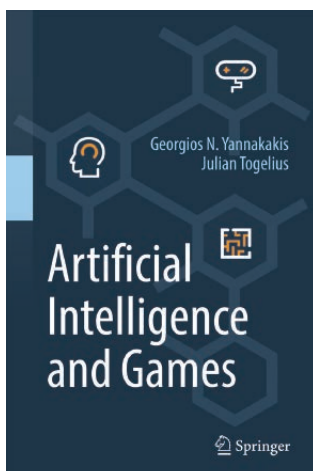
Artificial Intelligence and Games

Authors: Georgios N. Yannakakis and Julian Togelius

Publication date: 2018

ISBN: 9783319635187

Artificial Intelligence and Games is the first textbook dedicated to explaining how artificial intelligence (AI) techniques can be used in and for games. After introductory chapters that explain the background and key techniques in AI and games, the book explains how to use AI to generate content for games and to model players.
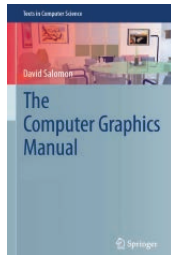
The first textbook dedicated to artificial intelligence and games
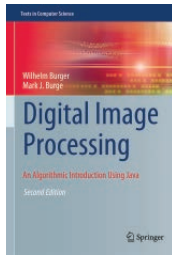
Digital Image Processing

Authors: Wilhelm Burger and Mark J. Burge

Publication date: 2016

ISBN: 9781447166832

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The Computer Graphics Manual

Author: David Salomon

Publication date: 2011

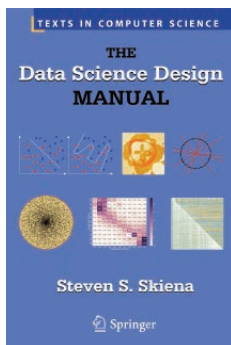**ISBN:** 9780857298850

Beginning Python Games Development

Authors: Will McGugan and Harrison Kinsley

Publication date: 2015

ISBN: 9781484209714

2nd edition

Learning Java with Games

Author: Chong-wei Xu

Publication date: 2018
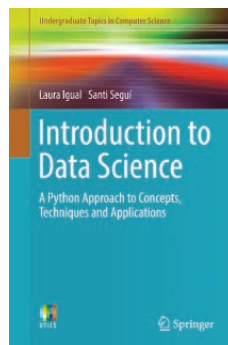
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The Data Science Design Manual

Author: Steven Skiena

Publication date: 2017

ISBN: 9783319554433

This engaging book provides a must-have introduction to the field of data science. It focuses on the fundamentals to becoming a good data scientist and the skills needed to build systems for collecting, analyzing, and interpreting data.
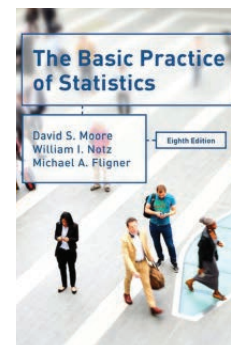
Introduction to Data Science: A Python Approach to Concepts, Techniques and Applications

Authors: Laura Igual and Santi Seguí

Publication date: 2017

ISBN: 9783319500164

This classroom-tested textbook presents the fundamentals of data science. The coverage spans key concepts adopted from statistics and machine learning, and useful techniques for graph analysis and parallel programming.

The Basic Practice of Statistics

Authors: David Moore, William Notz and Michael Fligner

Publication date: 2018

ISBN: 9781319187637

8th edition

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