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NUAHFM - JACKSON CLARKE

When shy Ivy's troublemaking twin Scarlet vanishes from Rookwood boarding school, Ivy is invited to "take her place." But when Ivy arrives, she discovers the school's true intention; she has to pretend to be Scarlet. Ivy must think like Scarlet, act like Scarlet, become Scarlet. What on earth happened to the real Scarlet, and why is the school trying to keep it a secret? Luckily for Ivy, Scarlet isn't about to disappear without a fight. She's left pieces of her journal carefully hidden all over the school for Ivy to find. Ivy's going to figure out what happened to Scarlet. She's got to. But the staff of Rookwood is always watching, and they'll do anything to keep their secrets buried...
Scarlet and Ivy Series: The Lost Twin (Book 1) The Whispers in the Walls (Book 2) The Dance in the Dark (Book 3)
Introduction to heat and mass transfer for advanced undergraduate and graduate engineering students, used in classrooms for over 38 years and updated regularly. Topics include conduction, convection, radiation, and phase-change. 2019

edition.

Advances in semiconductor technology have made possible the fabrication of structures whose dimensions are much smaller than the mean free path of an electron. This book gives a thorough account of the theory of electronic transport in such mesoscopic systems. After an initial chapter covering fundamental concepts, the transmission function formalism is presented, and used to describe three key topics in mesoscopic physics: the quantum Hall effect; localisation; and double-barrier tunnelling. Other sections include a discussion of optical analogies to mesoscopic phenomena, and the book concludes with a description of the non-equilibrium Green's function formalism and its relation to the transmission formalism. Complete with problems and solutions, the book will be of great interest to graduate students of mesoscopic physics and nanoelectronic device engineering, as well as to established researchers in these fields.
This book constitutes the proceedings of the 4rd International Conference on e-Learning, e-Education, and Online Train-

ing, eLEOT 2018, held in Shanghai, China, in April 2018. The 49 revised full papers presented were carefully reviewed and selected from 120 submissions. They focus on most recent and innovative trends in this broad area, ranging from distance education to collaborative learning, from interactive learning environments to the modelling of STEM (Science, Technology, Mathematics, Engineering) curricula.

Compound Semiconductor Devices provides a comprehensive insight into today's standard technologies, covering the vast range of semiconductor products and their possible applications. The materials covered runs from the basics of conventional semiconductor technology through standard, power and opto semiconductors, to highly complex memories and microcontrollers and the special devices and modules for smartcards, automotive electronics, consumer electronics and telecommunications. Some chapters are devoted to the production of semiconductor components and their use in electronic systems as well as to quality management. The book offers students and users a unique overview of technology, architecture and areas of application of semiconductor products.

The new edition of the cornerstone text on electrochemistry Spans all the areas of electrochemistry, from the basics of thermodynamics and electrode kinetics to transport phenomena in electrolytes, metals, and semiconductors. Newly updated and expanded, the Third Edition covers important new treatments, ideas, and technologies while also increasing the book's accessibility for readers in related fields. Rigorous and complete presentation of the fundamental concepts In-depth examples applying the concepts to real-life design problems Homework

problems ranging from the reinforcing to the highly thought-provoking Extensive bibliography giving both the historical development of the field and references for the practicing electrochemist.

This book covers elementary discrete mathematics for computer science and engineering. It emphasizes mathematical definitions and proofs as well as applicable methods. Topics include formal logic notation, proof methods; induction, well-ordering; sets, relations; elementary graph theory; integer congruences; asymptotic notation and growth of functions; permutations and combinations, counting principles; discrete probability. Further selected topics may also be covered, such as recursive definition and structural induction; state machines and invariants; recurrences; generating functions.

A guide to some of the most important characters in the Kingdom Hearts series. Includes fold-out poster!

After an overview of major scientific discoveries of the 18th and 19th centuries, which created electrical science as we know and understand it and led to its useful applications in energy conversion, transmission, manufacturing industry and communications, this Circuits and Systems History book fills a gap in published literature by providing a record of the many outstanding scientists, mathematicians and engineers who laid the foundations of Circuit Theory and Filter Design from the mid-20th Century. Additionally, the book records the history of the IEEE Circuits and Systems Society from its origins as the small Circuit Theory Group of the Institute of Radio Engineers (IRE), which merged with the American Institute of Electrical Engineers (AIEE) to form IEEE in 1963, to the large and broad-coverage worldwide IEEE Soci-

ety which it is today. Many authors from many countries contributed to the creation of this book, working to a very tight time-schedule. The result is a substantial contribution to their enthusiasm and expertise which it is hoped that readers will find both interesting and useful. It is sure that in such a book omissions will be found and in the space and time available, much valuable material had to be left out. It is hoped that this book will stimulate an interest in the marvellous heritage and contributions that have come from the many outstanding people who worked in the Circuits and Systems area. Unlike books currently on the market, this book attempts to satisfy two goals: combine circuits and electronics into a single, unified treatment, and establish a strong connection with the contemporary world of digital systems. It will introduce a new way of looking not only at the treatment of circuits, but also at the treatment of introductory coursework in engineering in general. Using the concept of "abstraction," the book attempts to form a bridge between the world of physics and the world of large computer systems. In particular, it attempts to unify electrical engineering and computer science as the art of creating and exploiting successive abstractions to manage the complexity of building useful electrical systems. Computer systems are simply one type of electrical systems. +Balances circuits theory with practical digital electronics applications. +Illustrates concepts with real devices. +Supports the popular circuits and electronics course on the MIT OpenCourse Ware from which professionals worldwide study this new approach. +Written by two educators well known for their innovative teaching and research and their collaboration with industry. +Focuses on contemporary MOS technology.

The Mechanics and Thermodynamics of Continua presents a unified treatment of continuum mechanics and thermodynamics that emphasises the universal status of the basic balances and the entropy imbalance. These laws are viewed as fundamental building blocks on which to frame theories of material behaviour. As a valuable reference source, this book presents a detailed and complete treatment of continuum mechanics and thermodynamics for graduates and advanced undergraduates in engineering, physics and mathematics. The chapters on plasticity discuss the standard isotropic theories and, in addition, crystal plasticity and gradient plasticity.

This collection of short expository, critical and speculative texts offers a field guide to the cultural, political, social and aesthetic impact of software. Experts from a range of disciplines each take a key topic in software and the understanding of software, such as algorithms and logical structures.

Quantum computing explained in terms of elementary linear algebra, emphasizing computation and algorithms and requiring no background in physics. This introduction to quantum algorithms is concise but comprehensive, covering many key algorithms. It is mathematically rigorous but requires minimal background and assumes no knowledge of quantum theory or quantum mechanics. The book explains quantum computation in terms of elementary linear algebra; it assumes the reader will have some familiarity with vectors, matrices, and their basic properties, but offers a review of all the relevant material from linear algebra. By emphasizing computation and algorithms rather than physics, this primer makes quantum algorithms accessible to students and researchers in computer

science without the complications of quantum mechanical notation, physical concepts, and philosophical issues. After explaining the development of quantum operations and computations based on linear algebra, the book presents the major quantum algorithms, from seminal algorithms by Deutsch, Jozsa, and Simon through Shor's and Grover's algorithms to recent quantum walks. It covers quantum gates, computational complexity, and some graph theory. Mathematical proofs are generally short and straightforward; quantum circuits and gates are used to illuminate linear algebra; and the discussion of complexity is anchored in computational problems rather than machine models. *Quantum Algorithms via Linear Algebra* is suitable for classroom use or as a reference for computer scientists and mathematicians.

The new edition of an introductory text that teaches students the art of computational problem solving, covering topics ranging from simple algorithms to information visualization. This book introduces students with little or no prior programming experience to the art of computational problem solving using Python and various Python libraries, including PyLab. It provides students with skills that will enable them to make productive use of computational techniques, including some of the tools and techniques of data science for using computation to model and interpret data. The book is based on an MIT course (which became the most popular course offered through MIT's OpenCourseWare) and was developed for use not only in a conventional classroom but in a massive open online course (MOOC). This new edition has been updated for Python 3, reorganized to make it easier to use for courses that cover only a subset of the material, and offers additional material including five

new chapters. Students are introduced to Python and the basics of programming in the context of such computational concepts and techniques as exhaustive enumeration, bisection search, and efficient approximation algorithms. Although it covers such traditional topics as computational complexity and simple algorithms, the book focuses on a wide range of topics not found in most introductory texts, including information visualization, simulations to model randomness, computational techniques to understand data, and statistical techniques that inform (and misinform) as well as two related but relatively advanced topics: optimization problems and dynamic programming. This edition offers expanded material on statistics and machine learning and new chapters on Frequentist and Bayesian statistics.

Research collected from many disciplines, including computer architecture, computer-aided design, parallel algorithms, semiconductor technology, and testing.

For upper-level undergraduate courses in deterministic and stochastic signals and system engineering *An Integrative Approach to Signals, Systems and Inference* is a comprehensive text that builds on introductory courses in time- and frequency-domain analysis of signals and systems, and in probability. Directed primarily to upper-level undergraduates and beginning graduate students in engineering and applied science branches, this new textbook pioneers a novel course of study. Instead of the usual leap from broad introductory subjects to highly specialized advanced subjects, this engaging and inclusive text creates a study track for a transitional course. Properties and representations of deterministic signals and systems are reviewed and elab-

orated on, including group delay and the structure and behavior of state-space models. The text also introduces and interprets correlation functions and power spectral densities for describing and processing random signals. Application contexts include pulse amplitude modulation, observer-based feedback control, optimum linear filters for minimum mean-square-error estimation, and matched filtering for signal detection. Model-based approaches to inference are emphasized, in particular for state estimation, signal estimation, and signal detection. The text explores ideas, methods and tools common to numerous fields involving signals, systems and inference: signal processing, control, communication, time-series analysis, financial engineering, biomedicine, and many others. Signals, Systems and Inference is a long-awaited and flexible text that can be used for a rigorous course in a broad range of engineering and applied science curricula.

These books are intended to make Virgil's Latin accessible even to those with a fairly rudimentary knowledge of the language. There is a departure here from the format of the electronic books, with short sections generally being presented on single, or double, pages and endnotes entirely avoided. A limited number of additional footnotes is included, but only what is felt necessary for a basic understanding of the story and the grammar. Some more detailed footnotes have been taken from Conington's edition of the Aeneid.

Integrated Microelectronic Devices-Physics and Modeling Pearson A modern take on microelectronic device engineering Microelectronics is a 50-year-old engineering discipline still undergoing rapid evolution and societal adoption. Integrat-

ed Microelectronic Devices: Physics and Modeling fills the need for a rigorous description of semiconductor device physics that is relevant to modern nanoelectronics. The central goal is to present the fundamentals of semiconductor device operation with relevance to modern integrated microelectronics. Emphasis is devoted to frequency response, layout, geometrical effects, parasitic issues and modeling in integrated microelectronics devices (transistors and diodes). In addition to this focus, the concepts learned here are highly applicable in other device contexts. This text is suitable for a one-semester junior or senior-level course by selecting the front sections of selected chapters (e.g. 1-9). It can also be used in a two-semester senior-level or a graduate-level course by taking advantage of the more advanced sections. Mathematics for Computer Science This book covers elementary discrete mathematics for computer science and engineering. It emphasizes mathematical definitions and proofs as well as applicable methods. Topics include formal logic notation, proof methods; induction, well-ordering; sets, relations; elementary graph theory; integer congruences; asymptotic notation and growth of functions; permutations and combinations, counting principles; discrete probability. Further selected topics may also be covered, such as recursive definition and structural induction; state machines and invariants; recurrences; generating functions. Microelectronic Devices and Circuits McGraw-Hill College Combining solid state devices with electronic circuits for an introductory-level microelectronics course, this textbook offers an integrated approach so that students can truly understand how a circuit works. A concise writing style is employed, with the right level of detail and physics to help

students understand how a device works. Other features include an emphasis on modelling of electronic devices, and analysis of non-linear circuits. Spice problems, worked examples and end-of-chapter problems are included.

Kingdom Hearts: The Ultimate Handbook Scholastic Inc. A guide to some of the most important characters in the Kingdom Hearts series. Includes fold-out poster!

Fundamentals of Microelectronics John Wiley & Sons Fundamentals of Microelectronics, 2nd Edition is designed to build a strong foundation in both design and analysis of electronic circuits this text offers conceptual understanding and mastery of the material by using modern examples to motivate and prepare readers for advanced courses and their careers. The book's unique problem-solving framework enables readers to deconstruct complex problems into components that they are familiar with which builds the confidence and intuitive skills needed for success.

Foundations of Analog and Digital Electronic Circuits Elsevier Unlike books currently on the market, this book attempts to satisfy two goals: combine circuits and electronics into a single, unified treatment, and establish a strong connection with the contemporary world of digital systems. It will introduce a new way of looking not only at the treatment of circuits, but also at the treatment of introductory coursework in engineering in general. Using the concept of "abstraction," the book attempts to form a bridge between the world of physics and the world of large computer systems. In particular, it attempts to unify electrical engineering and computer science as the art of creating and exploiting successive abstractions to manage the complexity of building useful electrical systems. Computer systems are simply one type of electrical systems. +Bal-

ances circuits theory with practical digital electronics applications. +Illustrates concepts with real devices. +Supports the popular circuits and electronics course on the MIT OpenCourseWare from which professionals worldwide study this new approach. +Written by two educators well known for their innovative teaching and research and their collaboration with industry. +Focuses on contemporary MOS technology.

A HEAT TRANSFER TEXTBOOK Phlogiston Press Principles of Digital Communication-Cambridge University Press The renowned communications theorist Robert Gallager brings his lucid writing style to the study of the fundamental system aspects of digital communication for a one-semester course for graduate students. With the clarity and insight that have characterized his teaching and earlier textbooks, he develops a simple framework and then combines this with careful proofs to help the reader understand modern systems and simplified models in an intuitive yet precise way. A strong narrative and links between theory and practice reinforce this concise, practical presentation. The book begins with data compression for arbitrary sources. Gallager then describes how to modulate the resulting binary data for transmission over wires, cables, optical fibers, and wireless channels. Analysis and intuitive interpretations are developed for channel noise models, followed by coverage of the principles of detection, coding, and decoding. The various concepts covered are brought together in a description of wireless communication, using CDMA as a case study.

I Am Jazz Penguin The story of a transgender child based on the real-life experience of Jazz Jennings, who has become a spokesperson for transkids everywhere "This is an essential tool for parents and teach-

ers to share with children whether those kids identify as trans or not. I wish I had had a book like this when I was a kid struggling with gender identity questions. I found it deeply moving in its simplicity and honesty."—Laverne Cox (who plays Sophia in "Orange Is the New Black") From the time she was two years old, Jazz knew that she had a girl's brain in a boy's body. She loved pink and dressing up as a mermaid and didn't feel like herself in boys' clothing. This confused her family, until they took her to a doctor who said that Jazz was transgender and that she was born that way. Jazz's story is based on her real-life experience and she tells it in a simple, clear way that will be appreciated by picture book readers, their parents, and teachers.

Microelectronics
The Digital Scholar
How Technology is Transforming Scholarly Practice
A&C Black
While industries such as music, newspapers, film and publishing have seen radical changes in their business models and practices as a direct result of new technologies, higher education has so far resisted the wholesale changes we have seen elsewhere. However, a gradual and fundamental shift in the practice of academics is taking place. Every aspect of scholarly practice is seeing changes effected by the adoption and possibilities of new technologies. This book will explore these changes, their implications for higher education, the possibilities for new forms of scholarly practice and what lessons can be drawn from other sectors.

To Enrich Life
Klaus-Jurgen Bathe
Advanced Research in VLSI
Proceedings of the Fifth MIT Conference
Mit Press
Research collected from many disciplines, including computer architecture, computer-aided design, parallel algorithms, semiconductor technology, and testing.

The Mechanics and Thermodynamics of Continua
Cambridge University

Press
The Mechanics and Thermodynamics of Continua presents a unified treatment of continuum mechanics and thermodynamics that emphasises the universal status of the basic balances and the entropy imbalance. These laws are viewed as fundamental building blocks on which to frame theories of material behaviour. As a valuable reference source, this book presents a detailed and complete treatment of continuum mechanics and thermodynamics for graduates and advanced undergraduates in engineering, physics and mathematics. The chapters on plasticity discuss the standard isotropic theories and, in addition, crystal plasticity and gradient plasticity.

Introduction to Computation and Programming Using Python, second edition
With Application to Understanding Data
MIT Press
The new edition of an introductory text that teaches students the art of computational problem solving, covering topics ranging from simple algorithms to information visualization. This book introduces students with little or no prior programming experience to the art of computational problem solving using Python and various Python libraries, including PyLab. It provides students with skills that will enable them to make productive use of computational techniques, including some of the tools and techniques of data science for using computation to model and interpret data. The book is based on an MIT course (which became the most popular course offered through MIT's OpenCourseWare) and was developed for use not only in a conventional classroom but in in a massive open online course (MOOC). This new edition has been updated for Python 3, reorganized to make it easier to use for courses that cover only a subset of the material, and offers additional material including five new chapters. Students

are introduced to Python and the basics of programming in the context of such computational concepts and techniques as exhaustive enumeration, bisection search, and efficient approximation algorithms. Although it covers such traditional topics as computational complexity and simple algorithms, the book focuses on a wide range of topics not found in most introductory texts, including information visualization, simulations to model randomness, computational techniques to understand data, and statistical techniques that inform (and misinform) as well as two related but relatively advanced topics: optimization problems and dynamic programming. This edition offers expanded material on statistics and machine learning and new chapters on Frequentist and Bayesian statistics.

Introduction to Communication Systems-Cambridge University Press An accessible undergraduate textbook introducing key fundamental principles behind modern communication systems, supported by exercises, software problems and lab exercises.

Open Education International Perspectives in Higher Education Open Book Publishers This insightful collection of essays explores the ways in which open education can democratise access to education for all. It is a rich resource that offers both research and case studies to relate the application of open technologies and approaches in education settings around the world. A must-read for practitioners, policy-makers, scholars and students in the field of education.

Shape Interrogation for Computer Aided Design and Manufacturing Springer Science & Business Media Shape interrogation is the process of extraction of information from a geometric model. It is a fundamental component of Computer Aided Design and Manufacturing (CAD/CAM) systems. This book provides a

bridge between the areas geometric modeling and solid modeling. Apart from the differential geometry topics covered, the entire book is based on the unifying concept of recasting all shape interrogation problems to the solution of a nonlinear system. It provides the mathematical fundamentals as well as algorithms for various shape interrogation methods including nonlinear polynomial solvers, intersection problems, differential geometry of intersection curves, distance functions, curve and surface interrogation, umbilics and lines of curvature, and geodesics.

Electronic Transport in Mesoscopic Systems Cambridge University Press Advances in semiconductor technology have made possible the fabrication of structures whose dimensions are much smaller than the mean free path of an electron. This book gives a thorough account of the theory of electronic transport in such mesoscopic systems. After an initial chapter covering fundamental concepts, the transmission function formalism is presented, and used to describe three key topics in mesoscopic physics: the quantum Hall effect; localisation; and double-barrier tunnelling. Other sections include a discussion of optical analogies to mesoscopic phenomena, and the book concludes with a description of the non-equilibrium Green's function formalism and its relation to the transmission formalism. Complete with problems and solutions, the book will be of great interest to graduate students of mesoscopic physics and nanoelectronic device engineering, as well as to established researchers in these fields.

Signals, Systems and Inference, Global Edition For upper-level undergraduate courses in deterministic and stochastic signals and system engineering An Integrative Approach to Signals, Systems and Inference is a

comprehensive text that builds on introductory courses in time- and frequency-domain analysis of signals and systems, and in probability. Directed primarily to upper-level undergraduates and beginning graduate students in engineering and applied science branches, this new textbook pioneers a novel course of study. Instead of the usual leap from broad introductory subjects to highly specialized advanced subjects, this engaging and inclusive text creates a study track for a transitional course. Properties and representations of deterministic signals and systems are reviewed and elaborated on, including group delay and the structure and behavior of state-space models. The text also introduces and interprets correlation functions and power spectral densities for describing and processing random signals. Application contexts include pulse amplitude modulation, observer-based feedback control, optimum linear filters for minimum mean-square-error estimation, and matched filtering for signal detection. Model-based approaches to inference are emphasized, in particular for state estimation, signal estimation, and signal detection. The text explores ideas, methods and tools common to numerous fields involving signals, systems and inference: signal processing, control, communication, time-series analysis, financial engineering, biomedicine, and many others. Signals, Systems and Inference is a long-awaited and flexible text that can be used for a rigorous course in a broad range of engineering and applied science curricula. Aeneid Book 4 With Scansion, Interlinear Translation, Parsing and Notes These books are intended to make Virgil's Latin accessible even to those with a fairly rudimentary knowledge of the language. There is a departure here from the format of the electronic books,

with short sections generally being presented on single, or double, pages and endnotes entirely avoided. A limited number of additional footnotes is included, but only what is felt necessary for a basic understanding of the story and the grammar. Some more detailed footnotes have been taken from Conington's edition of the Aeneid. Compound Semiconductor Devices Structures and Processing John Wiley & Sons Compound Semiconductor Devices provides a comprehensive insight into today's standard technologies, covering the vast range of semiconductor products and their possible applications. The materials covered runs from the basics of conventional semiconductor technology through standard, power and opto semiconductors, to highly complex memories and microcontrollers and the special devices and modules for smartcards, automotive electronics, consumer electronics and telecommunications. Some chapters are devoted to the production of semiconductor components and their use in electronic systems as well as to quality management. The book offers students and users a unique overview of technology, architecture and areas of application of semiconductor products. The Revelry Open The Philosophy and Practices that are Revolutionizing Education and Science Ubiquity Press Affordable education. Transparent science. Accessible scholarship. These ideals are slowly becoming a reality thanks to the open education, open science, and open access movements. Running separate—if parallel—courses, they all share a philosophy of equity, progress, and justice. This book shares the stories, motives, insights, and practical tips from global leaders in the open movement. The Beauty of Horror 5: Haunt of Fame Coloring Book Ghoulia and pals pay homage to pop culture greats with a twist-

ed and terrifying Haunt of Fame in the newest edition of the bestselling coloring book series! Icons from across the entertainment arts are resurrected when Ghoulia and her undead friends show tribute to their favorite celebrities in their very own Haunt of Fame. Join her merrily-macabre squad of walking horrors as they spend their 15 minutes with the most famous forces to ever brighten our cultural landscape. While coloring the 80 pages of detailed, hand drawn designs, be sure to help Ghoulia find all the ghastly memorabilia and easter eggs hidden throughout. The Beauty of Horror 5: Haunt of Fame features the original size (9.9" x 10") and double-sided format that fans love!

Electrochemical Systems
John Wiley & Sons
The new edition of the cornerstone text on electrochemistry spans all the areas of electrochemistry, from the basics of thermodynamics and electrode kinetics to transport phenomena in electrolytes, metals, and semiconductors. Newly updated and expanded, the Third Edition covers important new treatments, ideas, and technologies while also increasing the book's accessibility for readers in related fields. Rigorous and complete presentation of the fundamental concepts. In-depth examples applying the concepts to real-life design problems. Homework problems ranging from the reinforcing to the highly thought-provoking. Extensive bibliography giving both the historical development of the field and references for the practicing electrochemist.

Nuclear Radiation Interactions
World Scientific Publishing Company
This book is a treatment on the foundational knowledge of Nuclear Science and Engineering. It is an outgrowth of a first-year graduate-level course which the author has taught over the years in the Department of Nuclear Science and Engineering at MIT. The em-

phasis of the book is on concepts in nuclear science and engineering in contrast to the traditional nuclear physics in a nuclear engineering curriculum. The essential difference lies in the importance we give to the understanding of nuclear radiation and their interactions with matter. We see our students as nuclear engineers who work with all kinds of nuclear devices, from fission and fusion reactors to accelerators and detection systems. In all these complex systems nuclear radiation play a central role. In generating nuclear radiation and using them for beneficial purposes, scientists and engineers must understand the properties of the radiation and how they interact with their surroundings. It is through the control of radiation interactions that we can develop new devices or optimize existing ones to make them more safe, powerful, durable, or economical. This is why radiation interaction is the essence of this book.

Call Down the Hawk (The Dreamer Trilogy, Book 1)
Scholastic Inc.
From the #1 New York Times bestselling author of *The Raven Boys*, a mesmerizing story of dreams and desires, death and destiny. The dreamers walk among us . . . and so do the dreamed. Those who dream cannot stop dreaming - they can only try to control it. Those who are dreamed cannot have their own lives - they will sleep forever if their dreamers die. And then there are those who are drawn to the dreamers. To use them. To trap them. To kill them before their dreams destroy us all.

Ronan Lynch is a dreamer. He can pull both curiosities and catastrophes out of his dreams and into his compromised reality.

Jordan Hennessy is a thief. The closer she comes to the dream object she is after, the more inextricably she becomes tied to it.

Carmen Farooq-Lane is a hunter. Her brother was a dreamer . . . and a killer. She has seen

what dreaming can do to a person. And she has seen the damage that dreamers can do. But that is nothing compared to the destruction that is about to be unleashed. . . .The Color of PixarChronicle BooksBold and beautiful, this volume presents hundreds of film stills from the Pixar archives in a glorious spectrum of color. Starting with bright white images and seamlessly flowing through the colors of the rainbow, it becomes crystal clear how each frame tells a story. Bound into a gorgeous volume, The Color of Pixar encapsulates everything there is to love about the studio: the attention to detail, the playful characters, and the sheer scope of their work in over 20 years of iconic feature films. Copyright ©2017 Disney Enterprises, Inc. and Pixar. All rights reserved.A Heat Transfer TextbookFifth EditionCourier Dover PublicationsIntroduction to heat and mass transfer for advanced undergraduate and graduate engineering students, used in classrooms for over 38 years and updated regularly. Topics include conduction, convection, radiation, and phase-change. 2019 edition.Open Educational ResourcesConversations in CyberspaceUnited Nations Educational Education systems today face two major challenges: expanding the reach of education and improving its quality. Traditional solutions will not suffice, especially in the context of today's knowledge-intensive societies. The Open Educational Resources movement offers one solution for extending the reach of education and expanding learning opportunities. The goal of the movement is to equalise access to knowledge worldwide through openly and freely available online high-quality content. UNESCO has contributed to building global awareness about Open Educational Resources, through facilitating an extended conversation in cyberspace. Over the

course of two years, a large and diverse international community came together in a series of online discussion forums to discuss the concept of Open Educational Resources and its potential. In making the background papers and reports from those discussions available for the first time in print, this publication seeks to share even more widely the contributions made by so many. It is intended for all who may be intrigued by the Open Educational Resources movement - its promise and its progress.3264 and All ThatA Second Course in Algebraic GeometryCambridge University PressThis book can form the basis of a second course in algebraic geometry. As motivation, it takes concrete questions from enumerative geometry and intersection theory, and provides intuition and technique, so that the student develops the ability to solve geometric problems. The authors explain key ideas, including rational equivalence, Chow rings, Schubert calculus and Chern classes, and readers will appreciate the abundant examples, many provided as exercises with solutions available online. Intersection is concerned with the enumeration of solutions of systems of polynomial equations in several variables. It has been an active area of mathematics since the work of Leibniz. Chasles' nineteenth-century calculation that there are 3264 smooth conic plane curves tangent to five given general conics was an important landmark, and was the inspiration behind the title of this book. Such computations were motivation for Poincaré's development of topology, and for many subsequent theories, so that intersection theory is now a central topic of modern mathematics.Engineering Mechanics of SolidsDistance Education for Teacher TrainingRoutledgeFirst published in 2002. Routledge is an imprint of Taylor & Francis, an infor-

ma company. Quantum Algorithms via Linear Algebra: A Primer, MIT Press. Quantum computing explained in terms of elementary linear algebra, emphasizing computation and algorithms and requiring no background in physics. This introduction to quantum algorithms is concise but comprehensive, covering many key algorithms. It is mathematically rigorous but requires minimal background and assumes no knowledge of quantum theory or quantum mechanics. The book explains quantum computation in terms of elementary linear algebra; it assumes the reader will have some familiarity with vectors, matrices, and their basic properties, but offers a review of all the relevant material from linear algebra. By emphasizing computation and algorithms rather than physics, this primer makes quantum algorithms accessible to students and researchers in computer science without the complications of quantum mechanical notation, physical concepts, and philosophical issues. After explaining the development of quantum operations and computations based on linear algebra, the book presents the major quantum algorithms, from seminal algorithms by Deutsch, Jozsa, and Simon through Shor's and Grover's algorithms to recent quantum walks. It covers quantum gates, computational complexity, and some graph theory. Mathematical proofs are generally short and straightforward; quantum circuits and gates are used to illuminate linear algebra; and the discussion of complexity is anchored in computational problems rather than machine models. Quantum Algorithms via Linear Algebra is suitable for classroom use or as a reference for computer scientists and mathematicians. e-Learning, e-Education, and Online Training. 4th International Conference, eLEOT 2018, Shanghai, China, April 5-7, 2018, Pro-

ceedings. Springer. This book constitutes the proceedings of the 4th International Conference on e-Learning, e-Education, and Online Training, eLEOT 2018, held in Shanghai, China, in April 2018. The 49 revised full papers presented were carefully reviewed and selected from 120 submissions. They focus on most recent and innovative trends in this broad area, ranging from distance education to collaborative learning, from interactive learning environments to the modelling of STEM (Science, Technology, Mathematics, Engineering) curricula. Rule-Based Reasoning, Programming, and Applications. 5th International Symposium, RuleML 2011 - Europe, Barcelona, Spain, July 19-21, 2011, Proceedings. Springer Science & Business Media. This book constitutes the refereed proceedings of the 5th International Symposium on Rules, RuleML 2011 - Europe, held in Barcelona, Spain, in July 2011 - collocated with the 22nd International Joint Conference on Artificial Intelligence, IJCAI 2011. It is the first of two RuleML events that take place in 2011. The second RuleML Symposium - RuleML 2011 - America - will be held in Fort Lauderdale, FL, USA, in November 2011. The 18 revised full papers, 8 revised short papers and 3 invited track papers presented together with the abstracts of 2 keynote talks were carefully reviewed and selected from 58 submissions. The papers are organized in the following topical sections: rule-based distributed/multi-agent systems; rules, agents and norms; rule-based event processing and reaction rules; fuzzy rules and uncertainty; rules and the semantic Web; rule learning and extraction; rules and reasoning; and rule-based applications. A Short History of Circuits and Systems. From Green, Mobile, Pervasive Networking to Big Data Computing. Stylus Publishing, LLC. After an

overview of major scientific discoveries of the 18th and 19th centuries, which created electrical science as we know and understand it and led to its useful applications in energy conversion, transmission, manufacturing industry and communications, this Circuits and Systems History book fills a gap in published literature by providing a record of the many outstanding scientists, mathematicians and engineers who laid the foundations of Circuit Theory and Filter Design from the mid-20th Century. Additionally, the book records the history of the IEEE Circuits and Systems Society from its origins as the small Circuit Theory Group of the Institute of Radio Engineers (IRE), which merged with the American Institute of Electrical Engineers (AIEE) to form IEEE in 1963, to the large and broad-coverage worldwide IEEE Society which it is today. Many authors from many countries contributed to the creation of this book, working to a very tight time-schedule. The result is a substantial contribution to their enthusiasm and expertise which it is hoped that readers will find both interesting and useful. It is sure that in such a book omissions will be found and in the space and time available, much valuable material had to be left out. It is hoped that this book will stimulate an interest in the marvellous heritage and contributions that have come from the many outstanding people who worked in the Circuits and Systems area.

The Lost Twin-Sourcebooks, Inc. When shy Ivy's trouble-making twin Scarlet vanishes from Rookwood boarding school, Ivy is invited to "take her place." But when Ivy arrives, she discovers the school's true intention; she has to pretend to be Scarlet. Ivy must think like Scarlet, act like Scarlet, become Scarlet. What on earth happened to the real Scarlet, and why is the school trying to keep it a secret? Luckily

for Ivy, Scarlet isn't about to disappear without a fight. She's left pieces of her journal carefully hidden all over the school for Ivy to find. Ivy's going to figure out what happened to Scarlet. She's got to. But the staff of Rookwood is always watching, and they'll do anything to keep their secrets buried... Scarlet and Ivy Series: The Lost Twin (Book 1) The Whispers in the Walls (Book 2) The Dance in the Dark (Book 3) Software Studies A Lexicon MIT Press This collection of short expository, critical and speculative texts offers a field guide to the cultural, political, social and aesthetic impact of software. Experts from a range of disciplines each take a key topic in software and the understanding of software, such as algorithms and logical structures. Combining solid state devices with electronic circuits for an introductory-level microelectronics course, this textbook offers an integrated approach so that students can truly understand how a circuit works. A concise writing style is employed, with the right level of detail and physics to help students understand how a device works. Other features include an emphasis on modelling of electronic devices, and analysis of non-linear circuits. Spice problems, worked examples and end-of-chapter problems are included.

First published in 2002. Routledge is an imprint of Taylor & Francis, an informa company.

A modern take on microelectronic device engineering Microelectronics is a 50-year-old engineering discipline still undergoing rapid evolution and societal adoption. Integrated Microelectronic Devices: Physics and Modeling fills the need for a rigorous description of semiconductor device physics that is relevant to modern nanoelectronics. The central goal is to

present the fundamentals of semiconductor device operation with relevance to modern integrated microelectronics. Emphasis is devoted to frequency response, layout, geometrical effects, parasitic issues and modeling in integrated microelectronics devices (transistors and diodes). In addition to this focus, the concepts learned here are highly applicable in other device contexts. This text is suitable for a one-semester junior or senior-level course by selecting the front sections of selected chapters (e.g. 1-9). It can also be used in a two-semester senior-level or a graduate-level course by taking advantage of the more advanced sections.

While industries such as music, newspapers, film and publishing have seen radical changes in their business models and practices as a direct result of new technologies, higher education has so far resisted the wholesale changes we have seen elsewhere. However, a gradual and fundamental shift in the practice of academics is taking place. Every aspect of scholarly practice is seeing changes effected by the adoption and possibilities of new technologies. This book will explore these changes, their implications for higher education, the possibilities for new forms of scholarly practice and what lessons can be drawn from other sectors. The renowned communications theorist Robert Gallager brings his lucid writing style to the study of the fundamental system aspects of digital communication for a one-semester course for graduate students. With the clarity and insight that have characterized his teaching and earlier textbooks, he develops a simple framework and then combines this with careful proofs to help the reader understand modern systems and simplified models in an intuitive yet precise way. A strong narrative and links between theo-

ry and practice reinforce this concise, practical presentation. The book begins with data compression for arbitrary sources. Gallager then describes how to modulate the resulting binary data for transmission over wires, cables, optical fibers, and wireless channels. Analysis and intuitive interpretations are developed for channel noise models, followed by coverage of the principles of detection, coding, and decoding. The various concepts covered are brought together in a description of wireless communication, using CDMA as a case study.

Ghouliana and pals pay homage to pop culture greats with a twisted and terrifying *Haunt of Fame* in the newest edition of the bestselling coloring book series! Icons from across the entertainment arts are resurrected when Ghouliana and her undead friends show tribute to their favorite celebrities in their very own *Haunt of Fame*. Join her merrily-macabre squad of walking horrors as they spend their 15 minutes with the most famous forces to ever brighten our cultural landscape. While coloring the 80 pages of detailed, hand drawn designs, be sure to help Ghouliana find all the ghastly memorabilia and easter eggs hidden throughout. *The Beauty of Horror 5: Haunt of Fame* features the original size (9.9" x 10") and double-sided format that fans love!

This book constitutes the refereed proceedings of the 5th International Symposium on Rules, RuleML 2011 - Europe, held in Barcelona, Spain, in July 2011 - collocated with the 22nd International Joint Conference on Artificial Intelligence, IJCAI 2011. It is the first of two RuleML events that take place in 2011. The second RuleML Symposium - RuleML 2011 - America - will be held in Fort Lauderdale, FL, USA, in November 2011. The 18 revised full papers, 8 revised short papers

and 3 invited track papers presented together with the abstracts of 2 keynote talks were carefully reviewed and selected from 58 submissions. The papers are organized in the following topical sections: rule-based distributed/multi-agent systems; rules, agents and norms; rule-based event processing and reaction rules; fuzzy rules and uncertainty; rules and the semantic Web; rule learning and extraction; rules and reasoning; and rule-based applications.

This insightful collection of essays explores the ways in which open education can democratise access to education for all. It is a rich resource that offers both research and case studies to relate the application of open technologies and approaches in education settings around the world. A must-read for practitioners, policy-makers, scholars and students in the field of education.

Education systems today face two major challenges: expanding the reach of education and improving its quality. Traditional solutions will not suffice, especially in the context of today's knowledge-intensive societies. The Open Educational Resources movement offers one solution for extending the reach of education and expanding learning opportunities. The goal of the movement is to equalise access to knowledge worldwide through openly and freely available online high-quality content. UNESCO has contributed to building global awareness about Open Educational Resources, through facilitating an extended conversation in cyberspace. Over the course of two years, a large and diverse international community came together in a series of online discussion forums to discuss the concept of Open Educational Resources and its potential. In making the background papers and reports from those discussions available for the first time in print, this

publication seeks to share even more widely the contributions made by so many. It is intended for all who may be intrigued by the Open Educational Resources movement - its promise and its progress.

An accessible undergraduate textbook introducing key fundamental principles behind modern communication systems, supported by exercises, software problems and lab exercises.

From the #1 New York Times bestselling author of *The Raven Boys*, a mesmerizing story of dreams and desires, death and destiny. The dreamers walk among us . . . and so do the dreamed. Those who dream cannot stop dreaming - they can only try to control it. Those who are dreamed cannot have their own lives - they will sleep forever if their dreamers die. And then there are those who are drawn to the dreamers. To use them. To trap them. To kill them before their dreams destroy us all. Ronan Lynch is a dreamer. He can pull both curiosities and catastrophes out of his dreams and into his compromised reality. Jordan Hennesy is a thief. The closer she comes to the dream object she is after, the more inextricably she becomes tied to it. Carmen Farooq-Lane is a hunter. Her brother was a dreamer . . . and a killer. She has seen what dreaming can do to a person. And she has seen the damage that dreamers can do. But that is nothing compared to the destruction that is about to be unleashed. . . .

The story of a transgender child based on the real-life experience of Jazz Jennings, who has become a spokesperson for transkids everywhere "This is an essential tool for parents and teachers to share with children whether those kids identify as trans or not. I wish I had had a book like this when I was a kid strug-

gling with gender identity questions. I found it deeply moving in its simplicity and honesty."—Laverne Cox (who plays Sophia in "Orange Is the New Black") From the time she was two years old, Jazz knew that she had a girl's brain in a boy's body. She loved pink and dressing up as a mermaid and didn't feel like herself in boys' clothing. This confused her family, until they took her to a doctor who said that Jazz was transgender and that she was born that way. Jazz's story is based on her real-life experience and she tells it in a simple, clear way that will be appreciated by picture book readers, their parents, and teachers.

Affordable education. Transparent science. Accessible scholarship. These ideals are slowly becoming a reality thanks to the open education, open science, and open access movements. Running separate—if parallel—courses, they all share a philosophy of equity, progress, and justice. This book shares the stories, motives, insights, and practical tips from global leaders in the open movement.

Integrated Microelectronic Devices-Physics and Modeling Pearson

Shape interrogation is the process of extraction of information from a geometric model. It is a fundamental component of Computer Aided Design and Manufacturing (CAD/CAM) systems. This book provides a bridge between the areas geometric modeling and solid modeling. Apart from the differential geometry topics covered, the entire book is based on the unifying concept of recasting all shape interrogation problems to the solution of a nonlinear system. It provides the mathematical fundamentals as well as algorithms for various shape interrogation methods including nonlinear polynomial solvers, intersection problems, differential geometry of intersection

curves, distance functions, curve and surface interrogation, umbilics and lines of curvature, and geodesics.

This book can form the basis of a second course in algebraic geometry. As motivation, it takes concrete questions from enumerative geometry and intersection theory, and provides intuition and technique, so that the student develops the ability to solve geometric problems. The authors explain key ideas, including rational equivalence, Chow rings, Schubert calculus and Chern classes, and readers will appreciate the abundant examples, many provided as exercises with solutions available online. Intersection is concerned with the enumeration of solutions of systems of polynomial equations in several variables. It has been an active area of mathematics since the work of Leibniz. Chasles' nineteenth-century calculation that there are 3264 smooth conic plane curves tangent to five given general conics was an important landmark, and was the inspiration behind the title of this book. Such computations were motivation for Poincaré's development of topology, and for many subsequent theories, so that intersection theory is now a central topic of modern mathematics.

This book is a treatment on the foundational knowledge of Nuclear Science and Engineering. It is an outgrowth of a first-year graduate-level course which the author has taught over the years in the Department of Nuclear Science and Engineering at MIT. The emphasis of the book is on concepts in nuclear science and engineering in contrast to the traditional nuclear physics in a nuclear engineering curriculum. The essential difference lies in the importance we give to the understanding of nuclear radiation and their interactions with matter. We see our students as nuclear engineers who work with all kinds of nuclear de-

vices, from fission and fusion reactors to accelerators and detection systems. In all these complex systems nuclear radiation play a central role. In generating nuclear radiation and using them for beneficial purposes, scientists and engineers must understand the properties of the radiation and how they interact with their surroundings. It is through the control of radiation interactions that we can develop new devices or optimize existing ones to make them more safe, powerful, durable, or economical. This is why radiation interaction is the essence of this book.

Fundamentals of Microelectronics, 2nd Edition is designed to build a strong foundation in both design and analysis of electronic circuits this text offers conceptual understanding and mastery of the material by using modern examples to motivate and prepare readers for ad-

vanced courses and their careers. The books unique problem-solving framework enables readers to deconstruct complex problems into components that they are familiar with which builds the confidence and intuitive skills needed for success.

Bold and beautiful, this volume presents hundreds of film stills from the Pixar archives in a glorious spectrum of color. Starting with bright white images and seamlessly flowing through the colors of the rainbow, it becomes crystal clear how each frame tells a story. Bound into a gorgeous volume, The Color of Pixar encapsulates everything there is to love about the studio: the attention to detail, the playful characters, and the sheer scope of their work in over 20 years of iconic feature films. Copyright ©2017 Disney Enterprises, Inc. and Pixar. All rights reserved.