

Peter Dahmen Pop Up Templates

This contributed volume contains the research results of the Cluster of Excellence “ Integrative Production Technology for High-Wage Countries ”, funded by the German Research Society (DFG). The approach to the topic is genuinely interdisciplinary, covering insights from fields such as engineering, material sciences, economics and social sciences. The book contains coherent deterministic models for integrative product creation chains as well as harmonized cybernetic models of production systems. The content is structured into five sections: Integrative Production Technology, Individualized Production, Virtual Production Systems, Integrated Technologies, Self-Optimizing Production Systems and Collaboration Productivity. The target audience primarily comprises research experts and practitioners in the field of production engineering, but the book may also be beneficial for graduate students.

Introducing techniques for making pop-ups from one sheet of card, the third title in this series on paper engineering takes folding techniques into the third dimension. Each chapter introduces a new technical idea and shows how that technique can be adapted in many different ways, or combined with techniques from earlier chapters. These 3-D techniques can be incorporated into any design where typography and/or illustration are used, including mail-shots, personal publicity, invitations, business cards and greetings cards. With their emphasis on surface design over complex cutting, the pop-ups have an instant appeal for designers. Following the elegant, easy-to-follow style of Paul Jackson ’ s other titles for Laurence King, Cut and Fold Techniques for Pop-Up Designs is an essential resource for marketing professionals and design students.

This volume, number 91 in the Semiconductor and Semimetals series, focuses on defects in semiconductors. Defects in semiconductors help to explain several phenomena, from diffusion to getter, and to draw theories on materials’ behavior in response to electrical or mechanical fields. The volume includes chapters focusing specifically on electron and proton irradiation of silicon, point defects in zinc oxide and gallium nitride, ion implantation defects and shallow junctions in silicon and germanium, and much more. It will help support students and scientists in their experimental and theoretical paths. Expert contributors
Reviews of the most important recent literature
Clear illustrations
A broad view, including examination of defects in different semiconductors

This book on fintechs shows an international comparison on a global level. It is the first book where 10 years of financing rounds for fintechs have been analyzed for 10 different fintech segments. It is the first book to show the Canvas business model for fintechs. Professionals and students get a global understanding of fintechs. The case examples in the book cover Europe, the U.S. and China. About the author: Matthias Fischer is professor of finance and banking at the Institute of Technology Nuremberg Georg-Simon-Ohm in Germany. His research has focused on strategy and M&A in the banking sector, value-based management, robo-advisory and fintechs. Dr. Fischer also serves as a member of the board of the IAE Nice Graduate School of Management, Universit   C   te d’Azur in France. He is internationally active as a strategy and financial advisor.
Reviews of the book:
FinTech is not the next ‘big thing’. It is the big thing now! FinTech is the new business model for the global financial sector, offering clear enormous potential for vast economies of scale and scope, massive cost savings and efficiency gains, significant risk reduction, and opening the door to banking for literally billions of currently unbanked people. Professor Fischer has done a masterful job of expertise and informatively taking us through all aspects of the revolutionary new FinTech business models. Using state-of-the-art research techniques, he insightfully shows us how FinTech firms are thriving and how they aspire to create value. His in-depth case studies unlock the keys to success in the FinTech firms. His fascinating book is a ‘must read’ for all financial professionals. Dr. Stephan Morrill, Professor of Economics and Finance, Andrus School of Business, Barry University, Miami, USA
Matthias Fischer’s latest book offers a comprehensive overview of Fintech business models around the world. With a very pedagogical approach, and in a particularly fluid style, the author takes us into the strategic logics of these new entrants to finance, who are carriers of innovation and sometimes of disruption, and whose strategies are focused on the need to always meet the emerging expectations of their customers. This precise and well-documented analysis should enable banks to reposition themselves in their ecosystem by studying these new business models, which will enable them to boost their growth. Professor Dr. Nadine Tournois, Dean of IAE Nice Graduate School of Management, Universit   C   te d’Azur, France, Chevalier de la L  gion d’honneur Fintech Business Models is a must-have book to understand the rapid and intense changes occurring in the financial sector. New technologies have allowed the birth of new financial species, such as Fintech, more adapted to the new digital economy. The content dedicated to the application of blockchain technology helps to understand its opportunities in the financial sector, not only in the means of payment and cryptocurrencies, but also in how blockchain can make multiple internal processes improve, allowing to optimize the management, efficiency and even security of operations. Without any doubt, this book offers an extraordinary vision of how the fintech sector has become a catalyst for change in banking in the context of the Internet Digital Society. Phd. Ricardo Palomo, Full Professor of Finance, Deputy Chancellor for Digital Transformation at Universidad CEU San Pablo, Madrid, Spain and member of the Board of Alstria Blockchain Ecosystem
This book provides a detailed and original overview of the most important fintech business models in the major global markets. Through a savvy use of the well-known Business Model Canvas methodology, the author explores the unique ecosystem, business model ’ s components, and sources of competitive advantage of successful fintech firms. The book, in particular, offers an insightful and comprehensive analysis of the winning and losing strategies and performances of fintech firms by segment of activity such as, instant digital payments, credit & factoring, social trading, personal finance management, blockchain and cryptocurrencies. It is indeed a very unique and valuable study on the fintech industry, its trends, and its emerging business models. Prof. Ivo Pezzuto, The International School of Management, Paris, France and Adjunct Professor of International Business and Strategic Management Universit   Cattolica del Sacro Cuore, Department of Business Management, Milan, Italy
The emergence of fintechs is one of the most relevant drivers of change in the financial services industry. The book presented here delivers an impressive overview of fintechs ’ activity areas, business models and funding patterns. The book reflects the state of the art of the current fintech world. Prof. Dr. J  rgen Moormann, Professor of Bank and Process Management at Frankfurt School of Finance & Management, Germany

Volume IV: Molecular Genetic and Genomic Markers

5th International Visual Informatics Conference, IVIC 2017, Bangi, Malaysia, November 28 – 30, 2017, Proceedings

Incidence, Inheritance, and Evolution

5th International Conference, PAKM 2004, Vienna, Austria, December 2-3, 2004, Proceedings

Cardiac Tissue Engineering

High-Quality and Real-Time Rendering with DXR and Other APIs

Methods, Tools and Trends

Peek inside this spring-inspired pop-up book and discover how flowers are more than just beautiful; they are critical components of the natural world. Bees buzz, hummingbirds sip, and bats flit amongst the brilliant petals. Each spread is filled with unique pop-ups, revealing pull-tabs, and captivating educational facts!

Here, the editors Rolf Gleiter and Henning Hopf present an excellent overview of all the important aspects and latest results in cyclophane chemistry. Clearly structured and covering the entire range, the book introduces readers to the most recent research in the field. Twenty chapters, written by well-known scientists, cover in particular: – synthesis of carbo- and heterocyclic cyclophanes and metallocenophanes, – structural and spectroscopic properties of cyclophanes, – current and future applications in synthesis and material science, – novel reactions of cyclophanes, – use of cyclophanes as building blocks in supramolecular chemistry for this fascinating class of compounds. Thus, this is not only an extremely valuable source of information for synthetic organic chemists, but also a ready reference for scientists working in related fields of arene chemistry, stereoselective synthesis, material science, and bioorganic chemistry.

Showcases the designs of pop-up creators from around the world, offering examples on how to construct them.

Amazing things emerge from ordinary paper with Guy Petzall’s geometric kirigami designs. Starting with one of the many patterns beautifully presented in this volume, anyone with the ability to cut paper can make a pop-up card with an astonishing design – and then make it collapse again into a flat piece of paper. Ullagami Volume 1 starts with basic principles, then evolves them into ever more complex and beautiful patterns. The book also includes 8 pre-cut beginner’s templates, ready to fold, so that there is an almost instant reward for those new to kirigami. Contents of each volume: Introduction, tools & techniques, 25 templates to cut, 8 pre-cut templates.

Smarter Regulations for Small and Medium-Size Enterprises

Pop-Up Design and Paper Mechanics

The Art of Dimensional, Moving Paper Designs

Sound to Sense, Sense to Sound

And Other Extraordinary Pop-Up Contraptions

The Art of Papercraft

This Book Is a Planetarium

The two volume set, LNCS 11735 and 11736, constitutes the proceedings of the 24th European Symposium on Research in Computer Security, ESORIC 2019, held in Luxembourg, in September 2019. The total of 67 full papers included in these proceedings was carefully reviewed and selected from 344 submissions. The papers were organized in topical sections named as follows: Part I: machine learning; information leakage; signatures and re-encryption; side channels; formal modelling and verification; attacks; secure protocols; useful tools; blockchain and smart contracts. Part II: software security; cryptographic protocols; security models; searchable encryption; privacy; key exchange protocols; and web security.

A celebration of the monuments, landmarks and other sites that make Paris unmistakable from any other world city in a fun, interactive pop-up book format
A selection of the city’s most iconic monuments, landmarks, and architectural wonders unfold in seven pop-ups contained in a charming pint-sized package making it an easy impulse purchase. Easy to tuck in a bag or pocket, this book is truly the perfect keepsake for tourists as well as the ideal gift for anyone who wants to share their love of the world’s favorite city - Paris. Each spread delivers an iconic building or monument accompanied by a two page spread of text proving the historical background and cultural significance of the structure depicted by the pop-up. The package is designed with a retro feel like travel guides from the past lending it a nostalgic charm. This elegant, charming little book is the ideal gift or souvenir for anyone who wishes a keepsake of a visit to Paris. Represented as pop-ups are the most beautiful classic architectural sites of Paris: Arc de Triomphe, Eiffel Tower, H   tel des Invalides, the Louvre, Notre Dame, Place des Vosges, Centre Pompidou, and Sacr   -Coeur. Artist Dominique Ehrhard has conceived a one of a kind work that will delight all ages.

This book is a must-have for anyone serious about rendering in real time. With the announcement of new ray tracing APIs and hardware to support them, developers can easily create real-time applications with ray tracing as a core component. As ray tracing on the GPU becomes faster, it will play a more central role in real-time rendering. Ray Tracing Gems provides key building blocks for developers of games, architectural applications, visualizations, and more. Experts in rendering share their knowledge by explaining everything from nitty-gritty techniques that will improve any ray tracer to mastery of the new capabilities of current and future hardware. What you’ll learn: The latest ray tracing techniques for developing real-time applications in multiple domains
Guidance, advice, and best practices for rendering applications with Microsoft DirectX Raytracing (DXR)
How to implement high-performance graphics for interactive visualizations, games, simulations, and more
Who this book is for: Developers who are looking to leverage the latest APIs and GPU technology for real-time rendering and ray tracing
Students looking to learn about best practices in these areas
Enthusiasts who want to understand and experiment with their new GPUs

This volume continues the tradition formed in Nanotechnology in Catalysis 1 and 2. As with those books, this one is based upon an ACS symposium. Some of the most illustrious names in heterogeneous catalysis are among the contributors. The book covers: Design, synthesis, and control of catalysts at nanoscale; understanding of catalytic reaction at nanometer scale; characterization of nanomaterials as catalysts; nanoparticle metal or metal oxides catalysts; nanomaterials as catalyst supports; new catalytic applications of nanomaterials.

Nanotechnology in Catalysis 3

Integrative Production Technology

How to Make Folding Paper Sculpture

The Art of Pop-Up

Physiognomy and ekphrasis in the ancient world

Wood Production, Wood Technology, and Biotechnological Impacts

OnDior Pop-up Origami: Architecture

A celebration of the monuments, landmarks and other sites that make Paris unmistakable from any other world city in a fun, interactive pop-up book format
A selection of the city’s most iconic monuments, landmarks, and architectural wonders unfold in seven pop-ups contained in a charming pint-sized package making it an easy impulse purchase. Easy to tuck in a bag or pocket, this book is truly the perfect keepsake for tourists as well as the ideal gift for anyone who wants to share their love of the world’s favorite city - Paris. Each spread delivers an iconic building or monument accompanied by a two page spread of text proving the historical background and cultural significance of the structure depicted by the pop-up. The package is designed with a retro feel like travel guides from the past lending it a nostalgic charm. This elegant, charming little book is the ideal gift or souvenir for anyone who wishes a keepsake of a visit to Paris. Represented as pop-ups are the most beautiful classic architectural sites of Paris: Arc de Triomphe, Eiffel Tower, H   tel des Invalides, the Louvre, Notre Dame, Place des Vosges, Centre Pompidou, and Sacr   -Coeur. Artist Dominique Ehrhard has conceived a one of a kind work that will delight all ages.

This book constitutes the refereed proceedings of the 5th International Conference on Advances in Visual Informatics, IVIC 2017, held in Bangi, Malaysia, in November 2017. The keynote and 72 papers presented were carefully reviewed and selected from 130 submissions. The papers are organized in the following topics: Visualization and Data Driven Technology; Engineering and Data Driven Innovation; Data Driven Societal Well-being and Applications; and Data Driven Cyber Security.

The Art of Pop-UpThe Magical World of Three-Dimensional Books

Never has humble paper had such radical ambitions. Defying every expectation of what a book can be, this pop-up extravaganza transforms into six fully functional tools: a real working planetarium projecting the constellations, a musical instrument complete with strings for strumming, a geometric drawing generator, an infinite calendar, a message decoder, and even a speaker that amplifies sound. Artist Kelli Anderson contributes enlightening text alongside each pop-up, explaining the scientific principles at play in her constructions and creating an interactive experience that’s as educational as it is extraordinary. Inspiring awe that lasts long after the initial pop. This Book Is a Planetarium leaves readers of all ages with a renewed appreciation for the way things workland for the enduring magic of books.

Programming for Computations - Python

Dynamics of Cancer

Third International Conference, ICCISoT 2020, Tripura, India, December 29-30, 2020, Proceedings

Entropy, Order Parameters and Complexity

Finite Difference Computing with Exponential Decay Models

Statistical Mechanics

Methods and Protocols

In the year 2001, Prof. Dr. Ursula K  es was appointed at the Faculty of Forest Sciences and Forest Ecology of the Georg-August-University G  ttingen to the chair Molecular Wood Biotechnology endowed by the Deutsche Bundesstiftung Umwelt (DBU). Her group studies higher fungi in basic and applied research. Research foci are on mushroom development and on fungal enzymes degrading wood and their applications in wood biotechnology. This book has been edited to thank the DBU for all support given to the chair Molecular Wood Biotechnology. Contributions to the book are from scientists from G  ttingen recognised in different fields of forestry and wood science. Chapters presented by members of the group Molecular Wood Biotechnology introduces into their areas of research. The book is designed for interested students of wood biology and wood technology but will also address scientists in the field.

Since the very beginnings of the digital humanities, Papyrology has been in the vanguard of the application of information technologies to its own scientific purposes, for both theoretical and practical reasons (the strong awareness towards the problems of human memory and the material ways of preserving it; the need to work with a multifarious and overwhelming amount of different data). After more than thirty years of development, we have now at our disposal the most advanced tools to make papyrological studies more and more effective, and even to create a new conception of "papyrology" and a new model of "edition" of the ancient documents. At this turning point, it is important to build an epistemological framework including all the different expressions of Digital Papyrology, to trace a historical sketch setting the background of the contemporary tools, and to provide a clear overview of the current theoretical and technological trends, so that all the possibilities currently available can be exploited following uniform pathways. The volume represents an innovative attempt to deal with such topics, usually relegated into very quick and general treatments within journal articles or papyrological handbooks.

Elegant and accessible, this interactive handbook teaches crafters of all ages how to create kinetic paper art. The projects are complete with examples, formulas, and the essential instruction that allows them to be constructed directly from the book with simple materials on hand: paper, scissors, and glue. Pop-ups are grouped by type—box or triangle—and as the chapters progress, the techniques are combined and layered for more dramatic effects. With its thorough explanations and inspiring ideas, this book will bring color and motion to crafters' cards, scrapbooks, and invitations.

This text provides a very simple, initial introduction to the complete scientific computing pipeline: models, discretization, algorithms, programming, verification, and visualization. The pedagogical strategy is to use one case study – an ordinary differential equation describing exponential decay processes – to illustrate fundamental concepts in mathematics and computer science. The book is easy to read and only requires a command of one-variable calculus and some very basic knowledge about computer programming. Contrary to similar texts on numerical methods and programming, this text has a much stronger focus on implementation and teaches testing and software engineering in particular.

History of Cryptography and Cryptanalysis

The Magical World of Three-Dimensional Books

A Botanical Pop-Up Book

Fintech Business Models

Playing with Pop-ups

Doing Business 2013

A Gentle Introduction to Numerical Simulations with Python

DIYEnter the enchanting world of pop-ups and handmade paper crafts. Join author Helen Hiebert as she guides you through materials, tools and pop-up basics including parallel folds, angle folds, combinations and variations, and layered pop-ups. Enjoy creating 20 projects to play with ranging from cards and books to buildings, graphic design pieces, and more. Featuring a high-end gallery of artists, whose beautiful work will inspire you to make your own amazing paper art, Playing with Pop-Ups will teach you to create interactive pieces that everyone will enjoy.

This book contains the papers presented at the 5th International Conference on Pr- tical Aspects of Knowledge Management organized by the Department of Knowledge Management, Institute of Computer Science and Business Informatics, University of Vienna. The event took place on December 02-03, 2004 in Vienna. The PAKM conference series offers a communication forum and meeting ground for practitioners and researchers engaged in developing and deploying advanced bu- ness solutions for the management of knowledge and intellectual capital. Content management have been elected for presentation. PAKM is a forum for people to share their views, to exchange ideas, to develop new insights, and to envision completely new kinds of solutions for knowledge management problems. The accepted papers are of high quality and are not too specialized so that the main issues can be understood by someone outside the respective ?eld. This is crucial for an interdisciplinary exchange of ideas. Like its predecessors, PAKM 2004 featured two invited talks. It is a real joy seeing the visibility of our world submitted - pers. This year, 163 papers and case studies were submitted, from which 48 were - cepted. This book presents computer programming as a key method for solving mathematical problems. There are two versions of the book, one for MATLAB and one for Python. The book was inspired by the Springer book TCSE 6: A Primer on Scientific Programming with Python (by Langtangen), but the style is more accessible and concise, in keeping with the needs of engineering students. The book outlines the shortest possible path from no previous experience with programming to a set of skills that allows the students to write simple programs for solving common emphasis is on generic algorithms, clean design of programs, use of functions, and automatic tests for verification.

This monograph covers recent advances in a range of acceleration techniques frequently used in convex optimization. Using quadratic optimization problems, the authors introduce two key families of methods, namely momentum and nested optimization schemes. These methods are covered in detail and include Chebyshev Acceleration, Nonlinear Acceleration, Nesterov Acceleration, Proximal Acceleration and Catalysts and Restart Schemes.This book provides the reader with an in-depth description of the developments in Acceleration Methods since the early 2000s.

This topic is important in the modern-day application of convex optimization techniques in many applicable areas.This book is an introduction to the topic that enables the reader to quickly understand the important principles and apply the techniques to their own research.

Cut and Fold Techniques for Pop-Up Designs

Practical Aspects of Knowledge Management

Advances in Visual Informatics

An Interdisciplinary Approach

Acceleration Methods

How to Make Pop-ups Step-by-step

A Manual of Paper Mechanisms

Paper artist and teacher Helen Hiebert compiles a one-of-kind collection of 40 unique projects, each using just one sheet of paper. Combining decorative paper techniques like marbling, stamping, and stenciling with dimensional techniques like origami, cutting, folding, quilting, stretching, weaving, and pop-ups, The Art of Papercraft offers a rich variety of projects that will delight crafters, artists, and designers alike, including paper votive lights, pop-up cards, folded paper gift boxes and envelopes, woven paper wall hangings, miniature one-sheet books, and much more. Every project is beautifully photographed and accompanied by step-by-step visual instructions. Guidance on selecting tools, materials, and paper selection; in-depth technique instructions; and profiles of contributing paper artists make this a rich and practical celebration of papercraft. This publication conforms to the EPUB Accessibility specification at WCAG 2.0 Level AA.

Cardiac Tissue Engineering: Methods and Protocols presents a collection of protocols on cardiac tissue engineering from pioneering and leading researchers around the globe. These include methods and protocols for cell preparation, biomaterial preparation, cell seeding, and cultivation in various systems. Written in the highly successful Methods in Molecular Biology series format, chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step, readily reproducible laboratory protocols, and key tips on troubleshooting and avoiding known pitfalls. Authoritative and practical, Cardiac Tissue Engineering: Methods and Protocols highlights the major techniques, both experimental and computational, for the study of cardiovascular tissue engineering.

Here at last is the definitive book on how to make a pop-up. Every aspect of the creation of a pop-up, known as paper engineering, is clearly and thoroughly covered. All types of parallel folds, angle folds, wheels, and pull tabs are accurately detailed verbally and visually, flat and in dimension. Also included is a history of pop-ups and a step-by-step photographic essay on how a pop-up is made from start to finish. This guided tour is perfect for aspiring pop-up creators, paper engineers, students, and appreciators of this unique art form.

Presents an introduction to the craft of pop-up design, describing the basics of foundation shapes, building techniques, and pull-tab mechanisms and including project templates for a variety of projects.

Theory and Applications

A 21st Century Bestiary

Paris Pop-up

Defects in Semiconductors

Ray Tracing Gems

Digital Papyrology I

Limb Salvage of the Diabetic Foot

Matsuo is mounting a tree of tsurus for the Japanese festival in his city. Keika dreams about her love lost in time. Mila finds in L   cio a friend she didn’t expect. Stories that cross in three mornings, in three different times, each with its own emotion. Like the three verses of a haiku.

Since the 1950s, Sound and Music Computing (SMC) research has had a profound impact on the development of culture and technology in our post-industrial society. SMC research approaches the whole sound and music communication chain from a multidisciplinary point of view. By combining scientific, technological and artistic methodologies it aims at understanding, modeling, representing and producing sound and music using computational approaches. This book, by describing the state of the art in SMC research, gives hints of future developments, whose general purpose will be to bridge the semantic gap, the hiatus that currently separates sound from sense and sense from sound.

From medieval bestiaries to Borges’s Book of Imaginary Beings, we’ve long been enchanted by extraordinary animals, be they terrifying three-headed dogs or asps impervious to a snake charmer’s song. But bestiaries are more than just zany zoology—they are artful attempts to convey broader beliefs about human beings and the natural order. Today, we no longer fear sea monsters or banshees. But from the infamous honey badger to the giant squid, animals continue to captivate us with the things they can do and the things they cannot, what we know about them and what we don’t. With The Book of Barely Imagined Beings, Caspar Henderson offers readers a fascinating, beautifully produced modern-day menagerie. But whereas medieval bestiaries were often based on folklore and myth, the creatures that abound in Henderson’s book—from the axolotl to the zebrafish—are, with one exception, very much with us, albeit sometimes in depleted numbers. The Book of Barely Imagined Beings transports readers to a world of real creatures that seem as if they should be made up—that are somehow more astonishing than anything we might have imagined. The yeti crab, for example, uses its furry claws to farm the bacteria on which it feeds. The waterbear, meanwhile, is among nature’s “extreme survivors,” able to withstand a week unprotected in outer space. These and other strange and surprising species invite readers to reflect on what we value—or fail to value—and what we might change. A powerful combination of wit, cutting-edge natural history, and philosophical meditation, The Book of Barely Imagined Beings is an infectious and inspiring celebration of the sheer ingenuity and

variety of life in a time of crisis and change.

Tenth in a series of annual reports comparing business regulations in 185 economies, Doing Business 2013 measures regulations affecting 11 areas of everyday business activity around the world.

Pop-up!

Elements Of Pop Up

Geometric Kirigami Pop-ups

The Handbook of Neuropsychiatric Biomarkers, Endophenotypes and Genes

A State of the Art in Sound and Music Computing

Unique One-Sheet Projects Using Origami, Weaving, Quilting, Pop-Up, and Other Inventive Techniques

Visualizing the invisible with the human body

This volume constitutes the refereed proceedings of the Third International Conference on Computational Intelligence, Security and Internet of Things, ICCISoT 2020, held in Agartala, India, in December 2020. Due to the COVID-19 pandemic the conference was held online. The 23 full papers and 4 short papers were carefully reviewed and selected from 113 submissions. The papers are organised according to the following topics: computational intelligence, security, and internet of things.

Neuropsychiatric disorders such as schizophrenia, mood disorders, Alzheimer’s disease, epilepsy, alcoholism, substance abuse and others are one of the most debilitating illnesses worldwide characterizing by the complexity of the causes, and lacking the laboratory tests that may promote diagnostic and prognostic procedures. Recent advances in neuroscience, genomic, genetic, proteomic and metabolomic knowledge and technologies have opened the way to searching biomarkers and endophenotypes, which may offer powerful and exciting opportunity to understand the etiology and the underlying pathophysiological mechanisms of neuropsychiatric disorders. The challenge now is to translate these advances into meaningful diagnostic and therapeutic advances. This book offers a broad synthesis of the current knowledge about diverse topics of the biomarker and endophenotype strategies in neuropsychiatry. The book is organized into four interconnected volumes: “Neuropsychological Endophenotypes and Biomarkers” (with overview of methodological issues of the biomarker and endophenotype approaches in neuropsychiatry and some technological advances), “Neuroanatomical and Neuroimaging Endophenotypes and Biomarkers”, “Metabolic and Peripheral Biomarkers” and “Molecular Genetic and Genomic Markers”. The contributors are internationally and nationally recognized researchers and experts from 16 countries. This four-volume handbook is intended for a broad spectrum of readers including neuroscientists, psychiatrists, neurologists, endocrinologists, pharmacologists, clinical psychologists, general practitioners, geriatricians, health care providers in the field of neurology and mental health interested in trends that have crystallized in the last decade, and trends that can be expected to further evolve in the coming years. It is hoped that this book will also be a useful resource for the teaching of psychiatry, neurology, psychology and mental health.

In each generation, scientists must redefine their fields: abstracting, simplifying and distilling the previous standard topics to make room for now advances and methods. Sethna’s book takes this step for statistical mechanics - a field rooted in physics and chemistry whose ideas and methods are now central to information theory, complexity, and modern biology. Aimed at advanced undergraduates and early graduate students in all of these fields, Sethna limits his main presentation to the topics that future mathematicians and biologists, as well as physicists and chemists, will find fascinating and central to their work. The amazing breadth of the field is reflected in the author’s large supply of carefully crafted exercises, each an introduction to a whole field of study, everything from chaos through information theory to life at the end of the universe.

This book provides a practical guide to the treatment of patients as risk from limb amputation. The most common presentations of the diabetic foot are presented in concise and evidence-based chapters covering the neuropathic foot, the Charcot foot, the ischemic foot, and the infected foot. Each section includes an introduction to the clinical approach as well as an algorithm illustrating the limb salvage pathway and intervention steps. Limb Salvage of the Diabetic Foot: An Interdisciplinary Approach aims to help the reader build an interdisciplinary understanding of the diabetic foot and its treatment and is of interest to all members of the interdisciplinary diabetic foot team including surgeons, podiatrists, radiologists, nurses, orthotists, infectious disease physicians, and endocrinologists.

Computer Security - ESORICS 2019

Star Wars Kirigami

Flora

24th European Symposium on Research in Computer Security, Luxembourg, September 23–27, 2019, Proceedings, Part I

Trends in Computational Intelligence, Security and Internet of Things

The Book of Barely Imagined Beings

Modern Cyclophane Chemistry

This accessible textbook presents a fascinating review of cryptography and cryptanalysis across history. The text relates the earliest use of the monoalphabetic cipher in the ancient world, the development of the “unbreakable” Vigen   re cipher, and an account of how cryptology entered the arsenal of military intelligence during the American Revolutionary War. Moving on to the American Civil War, the book explains how the Union solved the Vigen   re ciphers used by the Confederates, before investigating the development of cipher machines throughout World War I and II. This is then followed by an exploration of cryptology in the computer age, from public-key cryptography and web security, to criminal cyber-attacks and cyber-warfare. Looking to the future, the role of cryptography in the Internet of Things is also discussed, along with the potential impact of quantum computing. Topics and features: presents a history of cryptology from ancient Rome to the present day, with a focus on cryptology in the 20th and 21st centuries; reviews the different types of cryptographic algorithms used to create secret messages, and the various methods for breaking such secret messages; provides engaging examples throughout the book illustrating the use of cryptographic algorithms in different historical periods; describes the notable contributions to cryptology of Herbert Yardley, William and Elizabeth Smith Friedman, Lester Hill, Agnes Meyer Driscoll, and Claude Shannon; concludes with a review of tantalizing unsolved mysteries in cryptology, such as the Voynich Manuscript, the Beale Ciphers, and the Kryptos sculpture. This engaging work is ideal as both a primary text for courses on the history of cryptology, and as a supplementary text for advanced undergraduate courses on computer security. No prior background in mathematics is assumed, beyond what would be encountered in an introductory course on discrete mathematics.

The onset of cancer presents one of the most fundamental problems in modern biology. In *Dynamics of Cancer*, Steven Frank produces the first comprehensive analysis of how particular genetic and environmental causes influence the age of onset. The book provides a unique conceptual and historical framework for understanding the causes of cancer and other diseases that increase with age. Using a novel quantitative framework of reliability and multistage breakdown, Frank unifies molecular, demographic, and evolutionary levels of analysis. He interprets a wide variety of observations on the age of cancer onset, the genetic and environmental causes of disease, and the organization of tissues with regard to stem cell biology and somatic mutation. Frank uses new quantitative methods to tackle some of the classic problems in cancer biology and aging: how the rate of increase in the incidence of lung cancer declines after individuals quit smoking, the distinction between the dosage of a chemical carcinogen and the time of exposure, and the role of inherited genetic variation in familial patterns of cancer. This is the only book that presents a full analysis of the age of cancer onset. It is a superb teaching tool and a rich source of ideas for new and experienced researchers. For cancer biologists, population geneticists, evolutionary biologists, and demographers interested in aging, this book provides new insight into disease progression, the inheritance of predisposition to disease, and the evolutionary processes that have shaped organismal design.

Celebrated paper artist and designer Marc Hagan-Guirey has applied his genius to the Star Wars galaxy in this book of 15 unique kirigami (cut-and-fold) ships featured in the saga's films. Ranging in difficulty from beginner to expert, each beautifully detailed model features step-by-step instructions and a template printed on cardstock—all that's needed are a utility knife, a cutting mat, and a ruler. Clear tips and guidance through the tricky stages help readers craft their own X-wing, Imperial Star Destroyer, Millennium Falcon, and a dozen more ships and vehicles, each accompanied by colorful and inspiring photographs of the final model on display (or ready for a jump to Hyperspace).

Physiognomy and ekphrasis are two of the most important modes of description in antiquity and represent the necessary precursors of scientific description. The primary way of divining the characteristics and fate of an individual, whether inborn or acquired, was to observe the patient's external characteristics and behaviour. This volume focuses initially on two types of descriptive literature in Mesopotamia: physiognomic omens and what we might call ekphrastic description. These modalities are traced through ancient India, Ugaritic and the Hebrew Bible, before arriving at the physiognomic features of famous historical figures such as Themistocles, Socrates or Augustus in the Graeco-Roman world, where physiognomic discussions become intertwined with typological analyses of human characters. The Arabic compendial culture absorbed and remade these different physiognomic and ekphrastic traditions, incorporating both Mesopotamian links between physiognomy and medicine and the interest in characterological 'types' that had emerged in the Hellenistic period. This volume offer the first wide-ranging picture of these modalities of description in antiquity.

Codes, Ciphers, and Their Algorithms

Origami

The Pocket Paper Engineer
Applied Canvas Method and Analysis of Venture Capital Rounds
Ullagami