

Applied Combinatorics Alan Tucker 6th Edition

Numbers, Groups and Codes
Artificial Intelligence and Algorithms in Intelligent Systems
Being as Communion
The Official 'Mastermind' Handbook
Basic Technical Mathematics with Calculus
Intelligent Tutoring Systems for Foreign Language Learning
Intelligent Computer Mathematics
Mathematics and War
Data Structures and Problem Solving Using Java
A Walk Through Combinatorics
Problem-Solving Methods in Combinatorics
Applied Combinatorics
Probability
Numbers, Hypotheses & Conclusions
Multiple Criteria Decision Making in the New Millennium
An Introduction to Statistical Methods and Data Analysis
Applied Business Statistics
Applied Combinatorics
Combinatorial Optimization
Selected Solutions for Applied Combinatorics
Combinatorics
A Unified Introduction to Linear Algebra
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Recent Advances in Robot Kinematics
An Introduction to Optimization
Foundations of Computer Science
Engineering Mathematics Through Applications
Ant Colony Optimization and Swarm Intelligence

Numbers, Groups and Codes

A new edition of a text for students in technical, pre-engineering technology, and other programs requiring coverage of basic mathematics. In 30 chapters the author presents an integrated treatment of mathematical topics (primarily algebra to calculus) which are necessary.

Artificial Intelligence and Algorithms in Intelligent Systems

The LNAI series reports state-of-the-art results in computer science research, development, and education, at a high level and in both printed and electronic form. Enjoying tight cooperation with the R&D community, with numerous individuals, as well as with prestigious organizations and societies, LNAI has grown into the most comprehensive computer science research forum available. The scope of LNAI spans the whole range of artificial intelligence and intelligent Information processing including interdisciplinary topics in a variety of application fields. In parallel to the printed book, each new volume is published electronically in LNCS Online.

Being as Communion

This volume contains a collection of papers presented at the 15th International Conference on Multiple Criteria Decision Making held in Ankara, Turkey July 10-14, 2000. This was one of the regular conferences of the International Society on Multiple Criteria Decision Making, which are held at approximately two-year intervals. The Ankara conference had 195 participants from 38 countries. A total of 185 papers were presented at the conference. The title of our volume is MCDM in the New Millennium. The papers presented at the conference reflect the theme. We had several papers on information technology (IT) and many application papers. Of the 81 application papers presented, 14 appear in the volume. We expect more IT applications of MCDM to appear in the future, in particular in the areas of e-commerce and the internet. The conference surroundings and accommodations were excellent, and conducive to both an outstanding academic exchange, and enjoyment and a cultural broadening of participants. We had a pleasant and enjoyable outing and visit to the Anatolian Civilizations Museum. We also had an outstanding banquet at which awards were presented. The MCDM Gold Medal was presented to Professor Thomas Saaty, of the University of Pittsburgh. The MCDM Presidential Service Award was presented to Professor Pekka Korhonen of the Helsinki School of Economics for his years of presidential service to the society. The society presented the MCDM Edgeworth-Pareto Award to Professor Alexander V. Lotov of the Russian Academy of Sciences.

The Official 'Mastermind' Handbook

Basic Technical Mathematics with Calculus

The term “Artificial Intelligence” has been used since 1956 and has become a very popular research field. Generally, it is the study of the computations that enable a system to perceive, reason and act. In the early days, it was expected to achieve the same intelligent behavior as a human, but found impossible at last. Its goal was thus revised to design and use of intelligent methods to make systems more efficient at solving problems. The term “Applied Intelligence” was thus created to represent its practicality. It emphasizes applications of applied intelligent systems to solve real-life problems in all areas including engineering, science, industry, automation, robotics, business, finance, medicine, bio-medicine, bio-informatics, cyberspace, and man-machine interactions. To endow the intelligent behavior of a system, many useful and interesting techniques have been developed. Some of them are even borrowed from the natural observation and biological phenomenon. Neural networks and evolutionary computation are two examples of them. Besides, some other heuristic approaches like data mining, adaptive control, intelligent manufacturing, autonomous agents, bio-informatics, reasoning, computer vision, decision support systems, expert systems, fuzzy logic, robots, intelligent interfaces,

internet technology, planning and scheduling, are also commonly used in applied intelligence.

Intelligent Tutoring Systems for Foreign Language Learning

This text teaches maths in a step-by-step fashion – ideal for students on first-year engineering and pre-degree courses. - Hundreds of examples and exercises, the majority set in an applied engineering context so that you immediately see the purpose of what you are learning - Introductory chapter revises indices, fractions, decimals, percentages and ratios - Fully worked solutions to every problem on the companion website at www.palgrave.com/engineering/singh plus searchable glossary, e-index, extra exercises, extra content and more!

Intelligent Computer Mathematics

Mathematics and War

Every year there is at least one combinatorics problem in each of the major international mathematical olympiads. These problems can only be solved with a very high level of wit and creativity. This book explains all the problem-solving

techniques necessary to tackle these problems, with clear examples from recent contests. It also includes a large problem section for each topic, including hints and full solutions so that the reader can practice the material covered in the book. The material will be useful not only to participants in the olympiads and their coaches but also in university courses on combinatorics.

Data Structures and Problem Solving Using Java

A Walk Through Combinatorics

Combinatorics is a subject of increasing importance, owing to its links with computer science, statistics and algebra. This is a textbook aimed at second-year undergraduates to beginning graduates. It stresses common techniques (such as generating functions and recursive construction) which underlie the great variety of subject matter and also stresses the fact that a constructive or algorithmic proof is more valuable than an existence proof. The book is divided into two parts, the second at a higher level and with a wider range than the first. Historical notes are included which give a wider perspective on the subject. More advanced topics are given as projects and there are a number of exercises, some with solutions given.

Problem-Solving Methods in Combinatorics

Applied Combinatorics

This is a textbook for an introductory combinatorics course that can take up one or two semesters. An extensive list of problems, ranging from routine exercises to research questions, is included. In each section, there are also exercises that contain material not explicitly discussed in the preceding text, so as to provide instructors with extra choices if they want to shift the emphasis of their course. Just as with the first edition, the new edition walks the reader through the classic parts of combinatorial enumeration and graph theory, while also discussing some recent progress in the area: on the one hand, providing material that will help students learn the basic techniques, and on the other hand, showing that some questions at the forefront of research are comprehensible and accessible for the talented and hard-working undergraduate. The basic topics discussed are: the twelvefold way, cycles in permutations, the formula of inclusion and exclusion, the notion of graphs and trees, matchings and Eulerian and Hamiltonian cycles. The selected advanced topics are: Ramsey theory, pattern avoidance, the probabilistic method, partially ordered sets, and algorithms and complexity. As the goal of the book is to encourage students to learn more combinatorics, every effort has been made to

provide them with a not only useful, but also enjoyable and engaging reading.

Probability

Now with solutions to selected problems, Applied Combinatorics, Second Edition presents the tools of combinatorics from an applied point of view. This bestselling textbook offers numerous references to the literature of combinatorics and its applications that enable readers to delve more deeply into the topics. After introducing fundamental counting

Numbers, Hypotheses & Conclusions

For a thing to be real, it must be able to communicate with other things. If this is so, then the problem of being receives a straightforward resolution: to be is to be in communion. So the fundamental science, indeed the science that needs to underwrite all other sciences, is a theory of communication. Within such a theory of communication the proper object of study becomes not isolated particles but the information that passes between entities. In *Being as Communion* philosopher and mathematician William Dembski provides a non-technical overview of his work on information. Dembski attempts to make good on the promise of John Wheeler, Paul Davies, and others that information is poised to replace matter as the primary stuff

of reality. With profound implications for theology and metaphysics, Being as Communion develops a relational ontology that is at once congenial to science and open to teleology in nature. All those interested in the intersections of theology, philosophy and science should read this book.

Multiple Criteria Decision Making in the New Millennium

Martin Gardner's Mathematical Games columns in Scientific American inspired and entertained several generations of mathematicians and scientists. Gardner in his crystal-clear prose illuminated corners of mathematics, especially recreational mathematics, that most people had no idea existed. His playful spirit and inquisitive nature invite the reader into an exploration of beautiful mathematical ideas along with him. These columns were both a revelation and a gift when he wrote them; no one--before Gardner--had written about mathematics like this. They continue to be a marvel. This volume, originally published in 1959, contains the first sixteen columns published in the magazine from 1956-1958. They were reviewed and briefly updated by Gardner for this 1988 edition.

An Introduction to Statistical Methods and Data Analysis

The series of biannual international conferences "ANTS - International Conference

on Ant Colony Optimization and Swarm Intelligence”, now in its sixth edition, was started ten years ago, with the organization of ANTS’98. As some readers might recall, the first edition of ANTS was titled “ANTS’98 – From Ant Colonies to Artificial Ants: First International Workshop on Ant Colony Optimization.” In fact, at that time the focus was mainly on ant colony optimization (ACO), the first swarm intelligence algorithm to go beyond a pure scientific interest and to enter the realm of real-world applications. Interestingly, in the ten years after the first edition there has been a growing interest not only for ACO, but for a number of other studies that belong more generally to the area of swarm intelligence. The rapid growth of the swarm intelligence field is attested by a number of indicators. First, the number of submissions and participants to the ANTS conferences has steadily increased over the years. Second, a number of international conferences in computational intelligence and related disciplines organize workshops on subjects such as swarm intelligence, ant algorithms, ant colony optimization, and particle swarm optimization. Third, IEEE started organizing, in 2003, the IEEE Swarm Intelligence Symposium (in order to maintain unity in this growing field, we are currently establishing a cooperation agreement between IEEE SIS and ANTS so as to have 1 IEEE SIS in odd years and ANTS in even years). Last, the Swarm Intelligence journal was born.

Applied Business Statistics

A modern, up-to-date introduction to optimization theory and methods. This authoritative book serves as an introductory text to optimization at the senior undergraduate and beginning graduate levels. With consistently accessible and elementary treatment of all topics, *An Introduction to Optimization, Second Edition* helps students build a solid working knowledge of the field, including unconstrained optimization, linear programming, and constrained optimization. Supplemented with more than one hundred tables and illustrations, an extensive bibliography, and numerous worked examples to illustrate both theory and algorithms, this book also provides:

- * A review of the required mathematical background material
- * A mathematical discussion at a level accessible to MBA and business students
- * A treatment of both linear and nonlinear programming
- * An introduction to recent developments, including neural networks, genetic algorithms, and interior-point methods
- * A chapter on the use of descent algorithms for the training of feedforward neural networks
- * Exercise problems after every chapter, many new to this edition
- * MATLAB(r) exercises and examples
- * Accompanying Instructor's Solutions Manual available on request

An Introduction to Optimization, Second Edition helps students prepare for the advanced topics and technological developments that lie ahead. It is also a useful book for researchers and professionals in mathematics, electrical engineering, economics, statistics, and business. An Instructor's Manual presenting detailed solutions to all the problems in the book is available from the Wiley editorial department.

Applied Combinatorics

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Combining traditional differential equation material with a modern qualitative and systems approach, this new edition continues to deliver flexibility of use and extensive problem sets. The second edition's refreshed presentation includes extensive new visuals, as well as updated exercises throughout.

Combinatorial Optimization

"T. 1. Graph Theory. 1. Ch. 1. Elements of Graph Theory. 3. Ch. 2. Covering Circuits and Graph Coloring. 53. Ch. 3. Trees and Searching. 95. Ch. 4. Network Algorithms. 129. Pt. 2. Enumeration. 167. Ch. 5. General Counting Methods for Arrangements and Selections. 169. Ch. 6. Generating Functions. 241. Ch. 7. Recurrence Relations. 273. Ch. 8. Inclusion-Exclusion. 309. Pt. 3. Additional Topics. 341. Ch. 9. Polya's Enumeration Formula. 343. Ch. 10. Games with Graphs. 371. . Appendix. 387. . Glossary of Counting and Graph Theory Terms. 403. . Bibliography. 407. . Solutions to Odd-Numbered Problems. 409. . Index. 441.

Selected Solutions for Applied Combinatorics

The articles of this book were reported and discussed at the fifth international symposium on Advances in Robot Kinematics. As is known, the first symposium of this series was organised in 1988 in Ljubljana. The following meetings took place every other year in Austria, Italy, and Slovenia (Linz, Ferrara, Ljubljana, Portoroz Bernardin). It must be emphasised that the symposia run under the patronage of the International Federation for the Theory of Machines and Mechanisms, IFToMM. In this period, Advances in Robot Kinematics has been able to attract the most outstanding authors in the area and also to create an optimum combination of a scientific pragmatism and a friendly atmosphere. Hence, it has managed to survive in a strong competition of many international conferences and meetings. In the most ancient way, robot kinematics is regarded as an application of the kinematics of rigid bodies. However, there are topics and problems that are typical for robot kinematics that cannot easily be found in any other scientific field. It is our belief that the initiative of Advances in Robot Kinematics has contributed to develop a remarkable scientific community. The present book is of interest to researchers, doctoral students and teachers, engineers and mathematicians specialising in kinematics of robots and mechanisms, mathematical modelling, simulation, design, and control of robots.

Combinatorics

Bijjective proofs are some of the most elegant and powerful techniques in all of

mathematics. Suitable for readers without prior background in algebra or combinatorics, *Bijjective Combinatorics* presents a general introduction to enumerative and algebraic combinatorics that emphasizes bijective methods. The text systematically develops the mathematical tools, such as basic counting rules, recursions, inclusion-exclusion techniques, generating functions, bijective proofs, and linear-algebraic methods, needed to solve enumeration problems. These tools are used to analyze many combinatorial structures, including words, permutations, subsets, functions, compositions, integer partitions, graphs, trees, lattice paths, multisets, rook placements, set partitions, Eulerian tours, derangements, posets, tilings, and abaci. The book also delves into algebraic aspects of combinatorics, offering detailed treatments of formal power series, symmetric groups, group actions, symmetric polynomials, determinants, and the combinatorial calculus of tableaux. Each chapter includes summaries and extensive problem sets that review and reinforce the material. Lucid, engaging, yet fully rigorous, this text describes a host of combinatorial techniques to help solve complicated enumeration problems. It covers the basic principles of enumeration, giving due attention to the role of bijective proofs in enumeration theory.

A Unified Introduction to Linear Algebra

This book describes the aspects of mathematical logic related to computer sciences. The materials adopted in this book are intended to attend to both the

peculiarities of logical systems and the requirements of computer science.
Contents: Prerequisites: Sets Inductive Definitions and Proofs Notations Propositional Logic: Propositions and Connectives Propositional Language Semantics Tautological Consequence Formal Deducibility Disjunctive and Conjunctive Normal Forms Adequate Sets of Connectives First-Order Logic: Proposition Functions and Quantifiers First-Order Language Semantics Logical Consequence Formal Deducibility Prenex Normal Form Formal Deducibility — Another Type: Formal Deducibility of Another Type Relation between the Two Types Soundness and Completeness: Satisfiability and Validity Soundness Completeness of Propositional Logic Completeness of First-Order Logic Completeness of First-Order Logic with Equality Independence Applications of Soundness and Completeness: Compactness Löwenheim-Skolem's Theorem Herbrand's Theorem Some Basic Notions of Model Theory Constructive Logic: Logic for Constructive Reasoning Semantics Formal Deducibility Soundness Completeness Modal Propositional Logic: Modal Propositional Language Semantics Formal Deducibility Soundness Completeness of T Completeness of S4, B, S5 Modal First-Order Logic: Modal First-Order Language Semantics Formal Deducibility Soundness Completeness Equality Readership: Graduates, undergraduates and researchers in computer science.

Mathematical Logic for Computer Science

The CD-ROM contains Web-based material for extensive practice, as well as numerous examples, exercises, activities and tests.

Hexaflexagons and Other Mathematical Diversions

Here is a solid introduction to graph theory, covering Dirac's theorem on k -connected graphs, Harary-Nashwilliam's theorem on the hamiltonicity of line graphs, Toida-McKee's characterization of Eulerian graphs, Fournier's proof of Kuratowski's theorem on planar graphs, and more. The book does not presuppose deep knowledge of any branch of mathematics, but requires only the basics of mathematics.

A Textbook of Graph Theory

Differential Equations with Boundary Value Problems

Perceptive text examines shortest paths, network flows, bipartite and nonbipartite matching, matroids and the greedy algorithm, matroid intersections, and the matroid parity problems. Suitable for courses in combinatorial computing and concrete computational complexity.

Opportunities and Challenges for Next-Generation Applied Intelligence

Applied Combinatorics, 6th Edition

This book is written for high school and college students learning about probability for the first time. It will appeal to the reader who has a healthy level of enthusiasm for understanding how and why the various results of probability come about. All of the standard introductory topics in probability are covered: combinatorics, the rules of probability, Bayes' theorem, expectation value, variance, probability density, common distributions, the law of large numbers, the central limit theorem, correlation, and regression. Calculus is not a prerequisite, although a few of the problems do involve calculus. These are marked clearly. The book features 150 worked-out problems in the form of examples in the text and solved problems at the end of each chapter. These problems, along with the discussions in the text, will be a valuable resource in any introductory probability course, either as the main text or as a helpful supplement.

Bijjective Combinatorics

The new 6th edition of Applied Combinatorics builds on the previous editions with more in depth analysis of computer systems in order to help develop proficiency in basic discrete math problem solving. As one of the most widely used books in combinatorial problems, this edition explains how to reason and model combinatorically while stressing the systematic analysis of different possibilities, exploration of the logical structure of a problem, and ingenuity. Although important uses of combinatorics in computer science, operations research, and finite probability are mentioned, these applications are often used solely for motivation. Numerical examples involving the same concepts use more interesting settings such as poker probabilities or logical games.

Introduction to Graph Theory

The C++ language is brought up-to-date and simplified, and the Standard Template Library is now fully incorporated throughout the text. Data Structures and Algorithm Analysis in C++ is logically organized to cover advanced data structures topics from binary heaps to sorting to NP-completeness. Figures and examples illustrating successive stages of algorithms contribute to Weiss' careful, rigorous and in-depth analysis of each type of algorithm.

Cambridge International AS and A Level Mathematics:

Mechanics Coursebook

Combinatorics, or the art and science of counting, is a vibrant and active area of pure mathematical research with many applications. The *Unity of Combinatorics* succeeds in showing that the many facets of combinatorics are not merely isolated instances of clever tricks but that they have numerous connections and threads weaving them together to form a beautifully patterned tapestry of ideas. Topics include combinatorial designs, combinatorial games, matroids, difference sets, Fibonacci numbers, finite geometries, Pascal's triangle, Penrose tilings, error-correcting codes, and many others. Anyone with an interest in mathematics, professional or recreational, will be sure to find this book both enlightening and enjoyable. Few mathematicians have been as active in this area as Richard Guy, now in his eighth decade of mathematical productivity. Guy is the author of over 300 papers and twelve books in geometry, number theory, graph theory, and combinatorics. In addition to being a life-long number-theorist and combinatorialist, Guy's co-author, Ezra Brown, is a multi-award-winning expository writer. Together, Guy and Brown have produced a book that, in the spirit of the founding words of the Carus book series, is accessible “not only to mathematicians but to scientific workers and others with a modest mathematical background.”

The Unity of Combinatorics

This book presents the latest trends and approaches in artificial intelligence research and its application to intelligent systems. It discusses hybridization of algorithms, new trends in neural networks, optimisation algorithms and real-life issues related to the application of artificial methods. The book constitutes the second volume of the refereed proceedings of the Artificial Intelligence and Algorithms in Intelligent Systems of the 7th Computer Science On-line Conference 2018 (CSOC 2018), held online in April 2018.

Applied Combinatorics

Empowering management students with statistical decision-making skills, this text instructs on how to become active participants where statistical findings are reported. Descriptions are provided of the vast role that statistics play in fields such as marketing, finance, human resources, production, and logistics. Rather than being a passive observer, this guide educates the meaning behind the numbers that allow those in business situations to be informed members of the decision-making process.

Functioning in the Real World

Mathematics has for centuries been stimulated, financed and credited by military

purposes. Some mathematical thoughts and mathematical technology have also been vital in war. During World War II mathematical work by the Anti-Hitler coalition was part of an aspiration to serve humanity and not help destroy it. At present, it is not an easy task to view the bellicose potentials of mathematics in a proper perspective. The book presents historical evidence and recent changes in the interaction between mathematics and the military. It discusses the new mathematically enhanced development of military technology which seems to have changed the very character of modern warfare.

Data Structures and Algorithm Analysis in C++

This textbook is an introduction to algebra via examples. The book moves from properties of integers, through other examples, to the beginnings of group theory. Applications to public key codes and to error correcting codes are emphasised. These applications, together with sections on logic and finite state machines, make the text suitable for students of computer science as well as mathematics students. Attention is paid to historical development of the mathematical ideas. This second edition contains new material on mathematical reasoning skills and a new chapter on polynomials has been added. The book was developed from first-level courses taught in the UK and USA. These courses proved successful in developing not only a theoretical understanding but also algorithmic skills. This book can be used at a wide range of levels: it is suitable for first- or second-level

university students, and could be used as enrichment material for upper-level school students.

Recent Advances in Robot Kinematics

Takes a fresh approach with a focus on the underlying concepts of precalculus. This book prepares students for a generation of calculus courses and allows instructors to become actively involved in the teaching process. It incorporates a number of learning features designed to ready students for a more positive calculus experience.

An Introduction to Optimization

Multilingual communication within the world community is important for economic, political, and cultural interactions. In a global environment where other languages are increasing in importance in addition to recognized international standards (i. e., English and French), language learning is becoming more important for improved international relations. At the same time, recent advances in instructional technology make the promise of building intelligent tutoring systems in advanced technology laboratories to teach these language skills a reality in the near future. These tutoring systems, therefore, may help us foster improved methods for

acquiring languages. As active language learners and instructional technology researchers, we felt an international meeting with similar individuals was needed to discuss how such advanced tutoring systems are to be designed and implemented. We held such a meeting, the results of which are presented in this volume. The purpose of this Advanced Workshop, sponsored by the NATO Scientific Affairs Division, was to bring together a multidisciplinary group of researchers who were active in the development of intelligent tutoring systems for foreign language learning. Participants came from computer science, computational linguistics, psychology, and foreign language learning. Washington, D.C. was selected for the Workshop site since it is Merryanna's home city, the capitol of the United States, and an international, multilingual community in its own right. Masoud agreed to the location (with a promise to be shown the White House!) and graciously volunteered to coordinate activities from the European side.

Foundations of Computer Science

Ott and Longnecker's AN INTRODUCTION TO STATISTICAL METHODS AND DATA ANALYSIS, 6th Edition, International Edition provides a broad overview of statistical methods for advanced undergraduate and graduate students from a variety of disciplines who have little or no prior course work in statistics. The authors teach students to solve problems encountered in research projects, to make decisions based on data in general settings both within and beyond the university setting,

and to become critical readers of statistical analyses in research papers and in news reports. The first eleven chapters present material typically covered in an introductory statistics course, as well as case studies and examples that are often encountered in undergraduate capstone courses. The remaining chapters cover regression modeling and design of experiments.

Engineering Mathematics Through Applications

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Data Structures and Problem Solving Using Java takes a practical and unique approach to data structures that separates interface from implementation. It is suitable for the second or third programming course. This book provides a practical introduction to data structures with an emphasis on abstract thinking and problem solving, as well as the use of Java. It does this through what remains a unique approach that clearly separates each data structure's interface (how to use a data structure) from its implementation (how to actually program that structure). Parts I (Tour of Java), II (Algorithms and Building Blocks), and III (Applications) lay the groundwork by discussing basic concepts and tools and providing some practical examples, while Part IV (Implementations) focuses on implementation of data structures. This forces the reader to think about the functionality of the data structures before the hash table is implemented. The Fourth Edition features many

new updates as well as new exercises.

Ant Colony Optimization and Swarm Intelligence

This series has been developed specifically for the Cambridge International AS & A Level Mathematics (9709) syllabus to be examined from 2020. Cambridge International AS & A Level Mathematics: Mechanics matches the corresponding unit of the syllabus, with clear and logical progression through. It contains materials on topics such as velocity and acceleration, force and motion, friction, connected particles, motion in a straight line, momentum, and work and energy. This coursebook contains a variety of features including recap sections for students to check their prior knowledge, detailed explanations and worked examples, end-of-chapter and cross-topic review exercises and 'Explore' tasks to encourage deeper thinking around mathematical concepts. Answers to coursebook questions are at the back of the book.

[ROMANCE](#) [ACTION & ADVENTURE](#) [MYSTERY & THRILLER](#) [BIOGRAPHIES & HISTORY](#) [CHILDREN'S](#) [YOUNG ADULT](#) [FANTASY](#) [HISTORICAL FICTION](#) [HORROR](#) [LITERARY FICTION](#) [NON-FICTION](#) [SCIENCE FICTION](#)