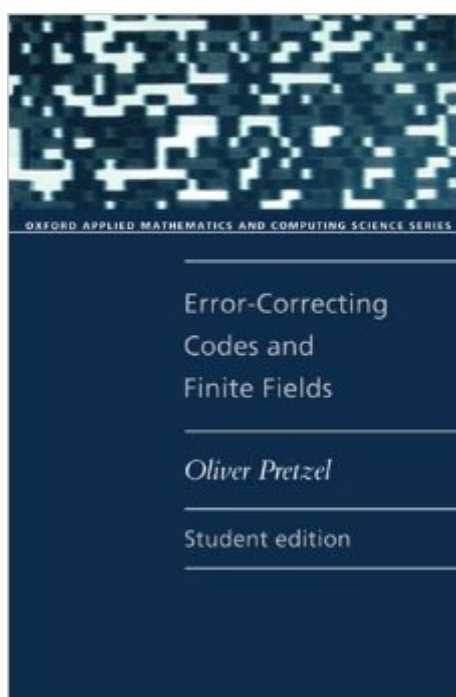


The book was found

Error-Correcting Codes And Finite Fields. Student Edition (Oxford Applied Mathematics And Computing Science Series)



Synopsis

This book provides engineers and computer scientists with all the tools necessary to implement modern error-processing techniques. It assumes only a basic knowledge of linear algebra and develops the mathematical theory in parallel with the codes. Central to the text are worked examples which motivate and explain the theory. The first part introduces the basic ideas of coding theory. The second and third cover the theory of finite fields and give a detailed treatment of BCH and Reed-Solomon codes. The fourth part is devoted to Goppa codes, both classical and geometric, concluding with the Skorobogatov-Vladut error processor. A special feature is a simplified (but rigorous) treatment of the geometry of curves.

Book Information

Paperback: 341 pages

Publisher: Oxford University Press (August 29, 1996)

Language: English

ISBN-10: 0192690671

ISBN-13: 978-0192690678

Product Dimensions: 9.1 x 0.8 x 6.1 inches

Shipping Weight: 6.4 ounces (View shipping rates and policies)

Average Customer Review: 4.7 out of 5 stars [See all reviews](#) (3 customer reviews)

Best Sellers Rank: #1,848,816 in Books (See Top 100 in Books) #27 in [Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Coding Theory](#) #850 in [Books > Computers & Technology > Computer Science > Systems Analysis & Design](#) #5055 in [Books > Textbooks > Humanities > Linguistics](#)

Customer Reviews

I have used this book for self study of the subject of error correction coding and I find it excellent. It is clear and well organized, with easy language and good examples all along. It does not require a professional mathematician to understand even the most subtle passages. I read it in conjunction with Todd Moon's other book on Error Correction Coding (also an excellent choice) and although Pretzel's book is much shorter and without examples of hardware, I much appreciated its style and structure. It would be nice if the author would publish an up-to-date errata of the several printing mistakes.

Overall an excellent book on coding theory. Pretzel discusses fundamental codes for error

correction such as hamming codes, BCH codes and Reed-Solomon codes. His presentation of finite fields is excellent. He does not simply slap equations down but leads you by way of examples and intuition and then applies them towards the construction of BCH and Reed-Solomon codes. This is an excellent book on coding theory.

This book have a good introduction of basic coding theory. Very interesting the $\mathbb{Z}/2$ fields and the polynomial arithmetic. This book is used at University of Salamanca, 5th of Ingenieria Informatica.

[Download to continue reading...](#)

Error-Correcting Codes and Finite Fields. Student Edition (Oxford Applied Mathematics and Computing Science Series) Error-Correcting Codes and Finite Fields (Oxford Applied Mathematics and Computing Science Series) Finite Fields, Coding Theory, and Advances in Communications and Computing (Lecture Notes in Pure and Applied Mathematics) Error Correcting Codes: A Mathematical Introduction (Chapman Hall/CRC Mathematics Series) The Mathematics of Coding Theory: Information, Compression, Error Correction, and Finite Fields A Commonsense Approach to the Theory of Error-Correcting Codes (Computer Systems Series) Error Correcting Codes: Theory and Applications Introduction to the Theory of Error-Correcting Codes Fundamentals of Error-Correcting Codes A First Course in Coding Theory (Oxford Applied Mathematics and Computing Science Series) Applications of Finite Fields (Institute of Mathematics and its Applications Conference Series, New Series) Quaternary Codes (Series on Applied Mathematics) How the Universe Got Its Spots: Diary of a Finite Time in a Finite Space Teaching Student-Centered Mathematics: Developmentally Appropriate Instruction for Grades 3-5 (Volume II) (2nd Edition) (Teaching Student-Centered Mathematics Series) Teaching Student-Centered Mathematics: Developmentally Appropriate Instruction for Grades Pre-K-2 (Volume I) (2nd Edition) (Teaching Student-Centered Mathematics Series) Codes and Algebraic Curves (Oxford Lecture Series in Mathematics and Its Applications) Numerical Computing With Modern Fortran (Applied Mathematics) Mrs. Fields Cookie Book: 100 Recipes from the Kitchen of Mrs. Fields Codes for Error Control and Synchronization (Artech House Communication & Electronic Defense Library) Black & Decker Codes for Homeowners, Updated 3rd Edition: Electrical - Mechanical - Plumbing - Building - Current with 2015-2017 Codes (Black & Decker Complete Guide)

[Dmca](#)