

Abstract Algebra By R Kumar

WHEN SOMEBODY SHOULD GO TO THE BOOK STORES, SEARCH OPENING BY SHOP, SHELF BY SHELF, IT IS TRULY PROBLEMATIC. THIS IS WHY WE PROVIDE THE BOOKS COMPILATIONS IN THIS WEBSITE. IT WILL UNQUESTIONABLY EASE YOU TO SEE GUIDE **ABSTRACT ALGEBRA BY R KUMAR** AS YOU SUCH AS.

BY SEARCHING THE TITLE, PUBLISHER, OR AUTHORS OF GUIDE YOU REALLY WANT, YOU CAN DISCOVER THEM RAPIDLY. IN THE HOUSE, WORKPLACE, OR PERHAPS IN YOUR METHOD CAN BE ALL BEST PLACE WITHIN NET CONNECTIONS. IF YOU WANT TO DOWNLOAD AND INSTALL THE ABSTRACT ALGEBRA BY R KUMAR , IT IS EXTREMELY EASY THEN, PREVIOUSLY CURRENTLY WE EXTEND THE PARTNER TO PURCHASE AND CREATE BARGAINS TO DOWNLOAD AND INSTALL ABSTRACT ALGEBRA BY R KUMAR SUITABLY SIMPLE!

THE MODERN ALGEBRA OF INFORMATION RETRIEVAL - S[?]NDOR DOMINICH 2008-04-03

THIS BOOK TAKES A UNIQUE APPROACH TO INFORMATION RETRIEVAL BY LAYING DOWN THE FOUNDATIONS FOR A MODERN ALGEBRA OF INFORMATION RETRIEVAL BASED ON LATTICE THEORY. ALL MAJOR RETRIEVAL METHODS DEVELOPED SO FAR ARE DESCRIBED IN DETAIL, ALONG WITH WEB RETRIEVAL ALGORITHMS, AND THE AUTHOR SHOWS THAT THEY ALL CAN BE TREATED ELEGANTLY IN A UNIFIED FORMAL WAY, USING LATTICE THEORY AS THE ONE BASIC CONCEPT. THE BOOK'S PRESENTATION IS CHARACTERIZED BY AN ENGINEERING-LIKE APPROACH.

ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS, 20TH EDITION - RAISINGHANIA M.D.

THIS WELL-ACCLAIMED BOOK, NOW IN ITS TWENTIETH EDITION, CONTINUES TO OFFER AN IN-DEPTH PRESENTATION OF THE FUNDAMENTAL CONCEPTS AND THEIR APPLICATIONS OF ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS PROVIDING SYSTEMATIC SOLUTION TECHNIQUES. THE BOOK PROVIDES STEP-BY-STEP PROOFS OF THEOREMS TO ENHANCE STUDENTS' PROBLEM-SOLVING SKILL AND INCLUDES PLENTY OF CAREFULLY CHOSEN SOLVED EXAMPLES TO ILLUSTRATE THE CONCEPTS DISCUSSED.

A BASIC COURSE IN REAL ANALYSIS - AJIT KUMAR 2014-01-10

BASED ON THE AUTHORS' COMBINED 35 YEARS OF EXPERIENCE IN TEACHING, A BASIC COURSE IN REAL ANALYSIS INTRODUCES STUDENTS TO THE ASPECTS OF REAL ANALYSIS IN A FRIENDLY WAY. THE AUTHORS OFFER INSIGHTS INTO THE WAY A TYPICAL MATHEMATICIAN WORKS OBSERVING PATTERNS, CONDUCTING EXPERIMENTS BY MEANS OF LOOKING AT OR CREATING EXAMPLES, TRYING TO UNDERSTAND THE UNDERLYING PRINCIPLES, AND COMING UP WITH GUESSES OR CONJECTURES AND THEN PROVING THEM RIGOROUSLY BASED ON HIS OR HER EXPLORATIONS. WITH MORE THAN 100 PICTURES, THE BOOK CREATES INTEREST IN REAL ANALYSIS BY ENCOURAGING STUDENTS TO THINK GEOMETRICALLY. EACH DIFFICULT PROOF IS PREFACED BY A STRATEGY AND EXPLANATION OF HOW THE STRATEGY IS TRANSLATED INTO RIGOROUS AND PRECISE PROOFS. THE AUTHORS THEN EXPLAIN THE MYSTERY AND ROLE OF INEQUALITIES IN ANALYSIS TO TRAIN STUDENTS TO ARRIVE AT ESTIMATES THAT WILL BE USEFUL FOR PROOFS. THEY HIGHLIGHT THE ROLE OF THE LEAST UPPER BOUND PROPERTY OF REAL NUMBERS, WHICH UNDERLIES ALL CRUCIAL RESULTS IN REAL ANALYSIS. IN ADDITION, THE BOOK DEMONSTRATES ANALYSIS AS A QUALITATIVE AS WELL AS QUANTITATIVE STUDY OF FUNCTIONS, EXPOSING STUDENTS TO ARGUMENTS THAT FALL UNDER HARD ANALYSIS. ALTHOUGH THERE ARE MANY BOOKS AVAILABLE ON THIS SUBJECT, STUDENTS OFTEN FIND IT DIFFICULT TO LEARN THE ESSENCE OF ANALYSIS ON THEIR OWN OR AFTER GOING THROUGH A COURSE ON REAL ANALYSIS. WRITTEN IN A CONVERSATIONAL TONE, THIS BOOK EXPLAINS THE HOWS AND WHYS OF REAL ANALYSIS AND PROVIDES GUIDANCE THAT MAKES READERS THINK AT EVERY STAGE.

NUMERICAL METHODS FOR SCIENTIFIC AND ENGINEERING COMPUTATION - M.K. JAIN 2003

DIFFERENTIAL EQUATIONS -

PROCEEDINGS 2004 VLDB CONFERENCE - VLDB 2004-09-17

PROCEEDINGS OF THE 30TH ANNUAL INTERNATIONAL CONFERENCE ON VERY LARGE DATA BASES HELD IN TORONTO, CANADA ON AUGUST 31 - SEPTEMBER 3 2004. ORGANIZED BY THE VLDB ENDOWMENT, VLDB IS THE PREMIER INTERNATIONAL CONFERENCE ON DATABASE TECHNOLOGY.

ALGEBRA AND ITS APPLICATIONS - DINH VAN HUYNH 2000

AMONG ALL AREAS OF MATHEMATICS, ALGEBRA IS ONE OF THE BEST SUITED TO FIND APPLICATIONS WITHIN THE FRAME OF OUR BOOMING TECHNOLOGICAL SOCIETY. THE THIRTY-EIGHT ARTICLES IN THIS VOLUME ENCOMPASS THE PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON ALGEBRA AND ITS APPLICATIONS (ATHENS, OH, 1999), WHICH EXPLORED THE APPLICATIONS AND INTERPLAY AMONG THE DISCIPLINES OF RING THEORY, LINEAR ALGEBRA, AND CODING THEORY. THE PRESENTATIONS COLLECTED HERE REFLECT THE DIALOGUE BETWEEN MATHEMATICIANS INVOLVED IN THEORETICAL ASPECTS OF ALGEBRA AND MATHEMATICIANS INVOLVED IN SOLVING PROBLEMS WHERE STATE-OF-THE-ART RESEARCH TOOLS MAY BE USED AND APPLIED. THIS CONTEMPORARY MATHEMATICS SERIES VOLUME COMMUNICATES THE POTENTIAL FOR COLLABORATION AMONG THOSE INTERESTED IN EXPLORING THE WEALTH OF APPLICATIONS FOR ABSTRACT ALGEBRA IN FIELDS SUCH AS INFORMATION AND CODING. THE EXPOSITORY PAPERS WOULD SERVE WELL AS SUPPLEMENTAL READING IN GRADUATE SEMINARS.

ABSTRACT ALGEBRA - GREGORY T. LEE 2018-04-13

THIS CAREFULLY WRITTEN TEXTBOOK OFFERS A THOROUGH INTRODUCTION TO ABSTRACT ALGEBRA, COVERING THE FUNDAMENTALS OF GROUPS, RINGS AND FIELDS. THE FIRST TWO CHAPTERS PRESENT PRELIMINARY TOPICS SUCH AS PROPERTIES OF THE INTEGERS AND EQUIVALENCE RELATIONS. THE AUTHOR THEN EXPLORES THE FIRST MAJOR ALGEBRAIC STRUCTURE, THE GROUP, PROGRESSING AS FAR AS

THE SYLOW THEOREMS AND THE CLASSIFICATION OF FINITE ABELIAN GROUPS. AN INTRODUCTION TO RING THEORY FOLLOWS, LEADING TO A DISCUSSION OF FIELDS AND POLYNOMIALS THAT INCLUDES SECTIONS ON SPLITTING FIELDS AND THE CONSTRUCTION OF FINITE FIELDS. THE FINAL PART CONTAINS APPLICATIONS TO PUBLIC KEY CRYPTOGRAPHY AS WELL AS CLASSICAL STRAIGHTEDGE AND COMPASS CONSTRUCTIONS. EXPLAINING KEY TOPICS AT A GENTLE PACE, THIS BOOK IS AIMED AT UNDERGRADUATE STUDENTS. IT ASSUMES NO PRIOR KNOWLEDGE OF THE SUBJECT AND CONTAINS OVER 500 EXERCISES, HALF OF WHICH HAVE DETAILED SOLUTIONS PROVIDED.

ELEMENTS OF REAL ANALYSIS - M.D. RAISINGHANIA 2003-06-01

THIS BOOK IS AN ATTEMPT TO MAKE PRESENTATION OF ELEMENTS OF REAL ANALYSIS MORE LUCID. THE BOOK CONTAINS EXAMPLES AND EXERCISES MEANT TO HELP A PROPER UNDERSTANDING OF THE TEXT. FOR B.A., B.Sc. AND HONOURS (MATHEMATICS AND PHYSICS), M.A. AND M.Sc. (MATHEMATICS) STUDENTS OF VARIOUS UNIVERSITIES/ INSTITUTIONS. AS PER UGC MODEL CURRICULUM AND FOR I.A.S. AND VARIOUS OTHER COMPETITIVE EXAMS.

ORDERED SETS AND LATTICES II -

THIS INDISPENSABLE REFERENCE SOURCE CONTAINS A WEALTH OF INFORMATION ON LATTICE THEORY. THE BOOK PRESENTS A SURVEY OF VIRTUALLY EVERYTHING PUBLISHED IN THE FIELDS OF PARTIALLY ORDERED SETS, SEMILATTICES, LATTICES, AND BOOLEAN ALGEBRAS THAT WAS REVIEWED IN REFERATIVNYI ZHURNAL MATEMATIKA FROM MID-1982 TO THE END OF 1985. A CONTINUATION OF A PREVIOUS VOLUME (THE ENGLISH TRANSLATION OF WHICH WAS PUBLISHED BY THE AMS IN 1989, AS VOLUME 141 IN TRANSLATIONS - SERIES 2), THIS COMPREHENSIVE WORK CONTAINS MORE THAN 2200 REFERENCES. MANY OF THE PAPERS COVERED HERE WERE ORIGINALLY PUBLISHED IN VIRTUALLY INACCESSIBLE PLACES. THE COMPILATION OF THE VOLUME WAS DIRECTED BY MILAN KOLIBIAR OF COMENIUS UNIVERSITY AT BRATISLAVA AND LEV A. SKORNYAKOV OF MOSCOW UNIVERSITY. OF INTEREST TO MATHEMATICIANS, AS WELL AS TO PHILOSOPHERS AND COMPUTER SCIENTISTS IN CERTAIN AREAS, THIS UNIQUE COMPENDIUM IS A MUST FOR ANY MATHEMATICAL LIBRARY.

TRIGONOMETRY & ALGEBRA -

LINEAR ALGEBRA AND ITS APPLICATIONS WITH R - RURIKO YOSHIDA 2021-06-23

THE BOOK DEVELOPED FROM THE NEED TO TEACH A LINEAR ALGEBRA COURSE TO STUDENTS FOCUSED ON DATA SCIENCE AND BIOINFORMATICS PROGRAMS. THESE STUDENTS TEND NOT TO REALIZE THE IMPORTANCE OF LINEAR ALGEBRA IN APPLIED SCIENCES SINCE TRADITIONAL LINEAR ALGEBRA COURSES TEND TO COVER MATHEMATICAL CONTEXTS BUT NOT THE COMPUTATIONAL ASPECT OF LINEAR ALGEBRA OR ITS APPLICATIONS TO DATA SCIENCE AND BIOINFORMATICS. THE AUTHOR PRESENTS THE TOPICS IN A TRADITIONAL COURSE YET OFFERS LECTURES AS WELL AS LAB EXERCISES ON SIMULATED AND EMPIRICAL DATA SETS. THIS TEXTBOOK PROVIDES STUDENTS A THEORETICAL BASIS WHICH CAN THEN BE APPLIED TO THE PRACTICAL R AND PYTHON PROBLEMS, PROVIDING THE TOOLS NEEDED FOR REAL-WORLD APPLICATIONS. EACH SECTION STARTS WITH WORKING EXAMPLES TO DEMONSTRATE HOW TOOLS FROM LINEAR ALGEBRA CAN HELP SOLVE PROBLEMS IN APPLIED SCIENCE. THESE EXERCISES START FROM EASY COMPUTATIONS, SUCH AS COMPUTING DETERMINANTS OF MATRICES, TO PRACTICAL APPLICATIONS ON SIMULATED AND EMPIRICAL DATA SETS WITH R SO THAT STUDENTS LEARN HOW TO GET STARTED WITH R ALONG WITH COMPUTATIONAL EXAMPLES IN EACH SECTION AND THEN THEY LEARN HOW TO APPLY WHAT THEY LEARN TO PROBLEMS IN APPLIED SCIENCES. THIS BOOK IS DESIGNED FROM FIRST PRINCIPLES TO DEMONSTRATE THE IMPORTANCE OF LINEAR ALGEBRA THROUGH WORKING COMPUTATIONAL EXAMPLES WITH R AND PYTHON INCLUDING TUTORIALS ON HOW TO INSTALL R IN THE APPENDIX. IF A STUDENT HAS NEVER SEEN R, THEY CAN GET STARTED WITHOUT ANY ADDITIONAL HELP. SINCE PYTHON IS ONE OF THE MOST POPULAR LANGUAGES IN DATA SCIENCE, OPTIMIZATION, AND COMPUTER SCIENCE, CODE SUPPLEMENTS ARE AVAILABLE FOR STUDENTS WHO FEEL MORE COMFORTABLE WITH PYTHON. R IS USED PRIMARILY FOR COMPUTATIONAL EXAMPLES TO DEVELOP STUDENT'S PRACTICAL COMPUTATIONAL SKILLS. TABLE OF CONTENTS PREFACE LIST OF FIGURES LIST OF TABLES 1. SYSTEMS OF LINEAR EQUATIONS AND MATRICES 2. MATRIX ARITHMETIC 3. DETERMINANTS 4. VECTOR SPACES 5. INNER PRODUCT SPACE 6. EIGEN VALUES AND EIGEN VECTORS 7. LINEAR REGRESSION 8. LINEAR PROGRAMMING NETWORK ANALYSIS APPENDICES A) INTRODUCTION TO RSTUDIO VIA AMAZON WEB SERVICE (AWS) B) INTRODUCTION TO R BIBLIOGRAPHY INDEX BIOGRAPHY DR. RURIKO YOSHIDA IS AN ASSOCIATE PROFESSOR OF OPERATIONS RESEARCH AT THE NAVAL POSTGRADUATE SCHOOL. SHE RECEIVED HER PH.D. IN MATHEMATICS FROM THE UNIVERSITY OF CALIFORNIA, DAVIS. HER RESEARCH TOPICS COVER A WIDE VARIETY OF AREAS: APPLICATIONS OF ALGEBRAIC COMBINATORICS TO STATISTICAL PROBLEMS SUCH AS STATISTICAL LEARNING ON NON-EUCLIDEAN SPACES, SENSOR NETWORKS, PHYLOGENETICS, AND PHYLOGENOMICS. SHE TEACHES COURSES IN STATISTICS, STOCHASTIC MODELS, PROBABILITY, AND DATA SCIENCE.

SELF ADDITIVE INVERSE ELEMENTS OF NEUTROSOPHIC RINGS AND FIELDS - T. CHALAPATHI

ALGEBRAIC NEUTROSOPHIC THEORY IS AN ABSTRACT BRANCH OF MODERN MATHEMATICS THAT ORIGINATED FROM CLASSICAL ALGEBRA THROUGH THE COMPOSITION OF NEUTROSOPHIC THEORY. ITS DEVELOPMENT STARTED FEW YEARS AGO, AND NOW A DAYS

NEUTROSOPHIC ANALYTIC METHODS AND RESULTS ARE IMPORTANT IN VARIOUS FIELDS OF ENGINEERING SCIENCE AND APPLIED MATHEMATICS WITH ITS APPLICATIONS.

NEUTROSOPHIC SETS AND SYSTEMS. AN INTERNATIONAL JOURNAL IN INFORMATION SCIENCE AND ENGINEERING, VOL. 36, 2020 - FLORENTIN SMARANDACHE 2020-10-01

NEUTROSOPHIC SETS AND SYSTEMS (NSS) IS AN ACADEMIC JOURNAL, PUBLISHED QUARTERLY ONLINE AND ON PAPER, THAT HAS BEEN CREATED FOR PUBLICATIONS OF ADVANCED STUDIES IN NEUTROSOPHY, NEUTROSOPHIC SET, NEUTROSOPHIC LOGIC, NEUTROSOPHIC PROBABILITY, NEUTROSOPHIC STATISTICS ETC. AND THEIR APPLICATIONS IN ANY FIELD.

LATTICE BASIS REDUCTION - MURRAY R. BREMNER 2011-08-12

FIRST DEVELOPED IN THE EARLY 1980S BY LENSTRA, LENSTRA, AND LOVASZ, THE LLL ALGORITHM WAS ORIGINALLY USED TO PROVIDE A POLYNOMIAL-TIME ALGORITHM FOR FACTORING POLYNOMIALS WITH RATIONAL COEFFICIENTS. IT VERY QUICKLY BECAME AN ESSENTIAL TOOL IN INTEGER LINEAR PROGRAMMING PROBLEMS AND WAS LATER ADAPTED FOR USE IN CRYPTANALYSIS. THIS BOOK PROVIDES AN ABSTRACT ALGEBRA - R. KUMAR 2007

MATHEMATICAL ANALYSIS - S. C. MALIK 1992

THE BOOK IS INTENDED TO SERVE AS A TEXT IN ANALYSIS BY THE HONOURS AND POST-GRADUATE STUDENTS OF THE VARIOUS UNIVERSITIES. PROFESSIONAL OR THOSE PREPARING FOR COMPETITIVE EXAMINATIONS WILL ALSO FIND THIS BOOK USEFUL. THE BOOK DISCUSSES THE THEORY FROM ITS VERY BEGINNING. THE FOUNDATIONS HAVE BEEN LAID VERY CAREFULLY AND THE TREATMENT IS RIGOROUS AND ON MODERN LINES. IT OPENS WITH A BRIEF OUTLINE OF THE ESSENTIAL PROPERTIES OF RATIONAL NUMBERS AND USING DEDEKIND'S CUT, THE PROPERTIES OF REAL NUMBERS ARE ESTABLISHED. THIS FOUNDATION SUPPORTS THE SUBSEQUENT CHAPTERS: TOPOLOGICAL FRAME WORK REAL SEQUENCES AND SERIES, CONTINUITY DIFFERENTIATION, FUNCTIONS OF SEVERAL VARIABLES, ELEMENTARY AND IMPLICIT FUNCTIONS, RIEMANN AND RIEMANN-STIELTJES INTEGRALS, LEBESGUE INTEGRALS, SURFACE, DOUBLE AND TRIPLE INTEGRALS ARE DISCUSSED IN DETAIL. UNIFORM CONVERGENCE, POWER SERIES, FOURIER SERIES, IMPROPER INTEGRALS HAVE BEEN PRESENTED IN AS SIMPLE AND LUCID MANNER AS POSSIBLE AND FAIRLY LARGE NUMBER SOLVED EXAMPLES TO ILLUSTRATE VARIOUS TYPES HAVE BEEN INTRODUCED. AS PER NEED, IN THE PRESENT SET UP, A CHAPTER ON METRIC SPACES DISCUSSING COMPLETENESS, COMPACTNESS AND CONNECTEDNESS OF THE SPACES HAS BEEN ADDED. FINALLY TWO APPENDICES DISCUSSING BETA-GAMMA FUNCTIONS, AND CANTOR'S THEORY OF REAL NUMBERS ADD GLORY TO THE CONTENTS OF THE BOOK.

ALGEBRAIC AND GEOMETRIC IDEAS IN THE THEORY OF DISCRETE OPTIMIZATION - JESUS A. DE LOERA 2013-01-31

IN RECENT YEARS, MANY NEW TECHNIQUES HAVE EMERGED IN THE MATHEMATICAL THEORY OF DISCRETE OPTIMIZATION THAT HAVE PROVEN TO BE EFFECTIVE IN SOLVING A NUMBER OF HARD PROBLEMS. THIS BOOK PRESENTS THESE RECENT ADVANCES, PARTICULARLY THOSE THAT ARISE FROM ALGEBRAIC GEOMETRY, COMMUTATIVE ALGEBRA, CONVEX AND DISCRETE GEOMETRY, GENERATING FUNCTIONS, AND OTHER TOOLS NORMALLY CONSIDERED OUTSIDE OF THE STANDARD CURRICULUM IN OPTIMIZATION. THESE NEW TECHNIQUES, ALL OF WHICH ARE PRESENTED WITH MINIMAL PREREQUISITES, PROVIDE A TRANSITION FROM LINEAR TO NONLINEAR DISCRETE OPTIMIZATION. THIS BOOK CAN BE USED AS A TEXTBOOK FOR ADVANCED UNDERGRADUATES OR FIRST-YEAR GRADUATE STUDENTS IN MATHEMATICS, COMPUTER SCIENCE OR OPERATIONS RESEARCH. IT IS ALSO APPROPRIATE FOR MATHEMATICIANS, ENGINEERS, AND SCIENTISTS ENGAGED IN COMPUTATION WHO WISH TO GAIN A DEEPER UNDERSTANDING OF HOW AND WHY ALGORITHMS WORK.

DECISION MAKING AND SOFT COMPUTING - RONEI MARCOS DE MORAES 2014-07-07

FLINS, ORIGINALLY AN ACRONYM FOR FUZZY LOGIC AND INTELLIGENT TECHNOLOGIES IN NUCLEAR SCIENCE, IS NOW EXTENDED TO COMPUTATIONAL INTELLIGENCE FOR APPLIED RESEARCH. THE CONTRIBUTIONS TO THE 11TH OF FLINS CONFERENCE COVER STATE-OF-THE-ART RESEARCH, DEVELOPMENT, AND TECHNOLOGY FOR COMPUTATIONAL INTELLIGENCE SYSTEMS, BOTH FROM THE FOUNDATIONS AND THE APPLICATIONS POINTS-OF-VIEW. CONTENTS: INVITED LECTURES: THE CONTRIBUTION OF FUZZY SETS TO DECISION SCIENCES (D DUBOIS) GRANULAR FUZZY SYSTEMS: A NEW DIRECTION IN SOFT COMPUTING AND HUMAN CENTRIC DECISION-MAKING (WITOLD PEDRYCZ) SOME APPROACHES TOWARDS LATTICE COMPUTING IN MATHEMATICAL MORPHOLOGY AND COMPUTATIONAL INTELLIGENCE (PETER SUSSNER) DECISION MAKING AND DECISION SUPPORT SYSTEMS STATISTICS, DATA ANALYSIS AND DATA MINING FOUNDATIONS OF COMPUTATIONAL INTELLIGENCE SOFT COMPUTING AND APPLIED RESEARCH INTELLIGENT SYSTEMS AND KNOWLEDGE ENGINEERING UNCERTAINTY MODELING INTELLIGENT INFORMATION PROCESSING READERSHIP: GRADUATE STUDENTS, RESEARCHERS, AND ACADEMICS IN ARTIFICIAL INTELLIGENCE/MACHINE LEARNING, INFORMATION MANAGEMENT, DECISION SCIENCES, DATABASES/INFORMATION SCIENCES AND FUZZY LOGIC. KEYWORDS: FLINS 2014; SOFT COMPUTING; KNOWLEDGE ENGINEERING; DECISION MAKING

KAC-MOODY GROUPS, THEIR FLAG VARIETIES AND REPRESENTATION THEORY - SHRAWAN KUMAR 2012-12-06

KAC-MOODY LIE ALGEBRAS \mathfrak{g} WERE INTRODUCED IN THE MID-1960S INDEPENDENTLY BY V. KAC AND R. MOODY, GENERALIZING THE FINITE-DIMENSIONAL SEMISIMPLE LIE ALGEBRAS WHICH WE REFER TO AS THE FINITE CASE. THE THEORY HAS UNDERGONE TREMENDOUS DEVELOPMENTS IN VARIOUS DIRECTIONS AND CONNECTIONS WITH DIVERSE AREAS AROUND, INCLUDING MATHEMATICAL PHYSICS, SO MUCH SO THAT THIS THEORY HAS BECOME A STANDARD TOOL IN MATHEMATICS. A DETAILED TREATMENT OF THE LIE ALGEBRA ASPECT OF THE THEORY CAN BE FOUND IN V. KAC'S BOOK [KAC-90]. THIS SELF-CONTAINED WORK TREATS THE ALGEBRO-GEOMETRIC AND THE TOPOLOGICAL ASPECTS OF KAC-MOODY THEORY FROM SCRATCH. THE EMPHASIS IS ON THE STUDY OF THE KAC-MOODY GROUPS G AND THEIR FLAG VARIETIES XY , INCLUDING THEIR DETAILED CONSTRUCTION, AND THEIR APPLICATIONS TO THE REPRESENTATION THEORY OF G . IN THE FINITE CASE, \mathfrak{g} IS NOTHING BUT A SEMISIMPLE \mathfrak{Y} SIMPLY-CONNECTED ALGEBRAIC GROUP AND X IS THE FLAG VARIETY \mathfrak{g}/P_Y FOR A PARABOLIC SUBGROUP $P_Y \subset G$.

MODERN ALGEBRA (ABSTRACT ALGEBRA) -

ELEMENTARY LINEAR ALGEBRA - KENNETH KUTTLER 2012-01-10

THIS IS AN INTRODUCTION TO LINEAR ALGEBRA. THE MAIN PART OF THE BOOK FEATURES ROW OPERATIONS AND EVERYTHING IS DONE IN TERMS OF THE ROW REDUCED ECHELON FORM AND SPECIFIC ALGORITHMS. AT THE END, THE MORE ABSTRACT NOTIONS OF VECTOR SPACES AND LINEAR TRANSFORMATIONS ON VECTOR SPACES ARE PRESENTED. HOWEVER, THIS IS INTENDED TO BE A FIRST COURSE IN LINEAR ALGEBRA FOR STUDENTS WHO ARE SOPHOMORES OR JUNIORS WHO HAVE HAD A COURSE IN ONE VARIABLE CALCULUS AND A REASONABLE BACKGROUND IN COLLEGE ALGEBRA. I HAVE GIVEN COMPLETE PROOFS OF ALL THE FUNDAMENTAL IDEAS, BUT SOME TOPICS SUCH AS MARKOV MATRICES ARE NOT COMPLETE IN THIS BOOK BUT RECEIVE A PLAUSIBLE INTRODUCTION. THE BOOK CONTAINS A COMPLETE TREATMENT OF DETERMINANTS AND A SIMPLE PROOF OF THE CAYLEY HAMILTON THEOREM ALTHOUGH THESE ARE OPTIONAL TOPICS. THE JORDAN FORM IS PRESENTED AS AN APPENDIX. I SEE THIS THEOREM AS THE BEGINNING OF MORE ADVANCED TOPICS IN LINEAR ALGEBRA AND NOT REALLY PART OF A BEGINNING LINEAR ALGEBRA COURSE. THERE ARE EXTENSIONS OF MANY OF THE TOPICS OF THIS BOOK IN MY ONLINE BOOK. I HAVE ALSO NOT EMPHASIZED THAT LINEAR ALGEBRA CAN BE CARRIED OUT WITH ANY FIELD ALTHOUGH THERE IS AN OPTIONAL SECTION ON THIS TOPIC, MOST OF THE BOOK BEING DEVOTED TO EITHER THE REAL NUMBERS OR THE COMPLEX NUMBERS. IT SEEMS TO ME THIS IS A REASONABLE SPECIALIZATION FOR A FIRST COURSE IN LINEAR ALGEBRA.

ADVANCED DIFFERENTIAL EQUATIONS - M D RAISINGHANIA 2018

THIS BOOK HAS BEEN DESIGNED TO ACQUAINT THE STUDENTS WITH ADVANCED CONCEPTS OF DIFFERENTIAL EQUATIONS. COMPREHENSIVELY WRITTEN, IT COVERS TOPICS SUCH AS BOUNDARY VALUE PROBLEMS AND THEIR SEPARATION OF VARIABLES, LAPLACE TRANSFORMS WITH APPLICATIONS, FOURIER TRANSFORMS AND THEIR APPLICATIONS, THE HANKEL TRANSFORM AND ITS APPLICATIONS AND CALCULUS OF VARIATIONS. WHILE THE TEXTBOOK LUCIDLY EXPLAINS THE THEORETICAL CONCEPTS, IT ALSO PRESENTS THE VARIOUS METHODS AND APPLICATIONS RELATED TO DIFFERENTIAL EQUATIONS. STUDENTS OF MATHEMATICS WOULD FIND THIS BOOK EXTREMELY USEFUL AS WELL AS THE ASPIRANTS OF VARIOUS COMPETITIVE EXAMINATIONS.

TB CALCULUS (MEERUT) -

ADVANCES IN PURE AND APPLIED ALGEBRA - RATNESH KUMAR MISHRA 2023-04-03

THIS PROCEEDINGS VOLUME DOCUMENTS THE CONTRIBUTIONS PRESENTED AT THE CONIAPS XXVII INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN PURE AND APPLIED ALGEBRA. THE ENTRIES FOCUS ON MODERN TRENDS AND TECHNIQUES IN VARIOUS BRANCHES OF PURE AND APPLIED ALGEBRA AND HIGHLIGHT THEIR APPLICATIONS IN CODING, CRYPTOGRAPHY, GRAPH, AND FUZZY THEORY. THE BOOK COMPRISED A TOTAL OF EIGHTEEN CHAPTERS, AMONG WHICH THE FIRST FOURTEEN CHAPTERS ARE DEVOTED TO ALGEBRA AND RELATED TOPICS, AND THE LAST FOUR CHAPTERS ARE INCLUDED APPLIED MATHEMATICS PARTS. THE CHAPTERS PRESENT THE LATEST RESEARCH WORK BEING DONE ON THE FRONTIERS OF THE VARIOUS BRANCHES OF ALGEBRA AS WELL AS SHOWCASE THE CROSS-FERTILIZATION OF THE IDEAS AND CONNECTION AMONG THESE BRANCHES. COVERING A BROAD RANGE OF TOPICS IN PURE AND APPLIED ALGEBRA, THIS VOLUME WOULD APPEAL TO A WIDE SPECTRUM OF THE RESEARCHER IN MATHEMATICS. THE MAIN AIM OF THIS MONOGRAPH IS TO CONTRIBUTE TO THE DEVELOPMENT OF PURE AND APPLIED ALGEBRA AND HENCE WE PURPOSELY SOUGHT A CROSS-SECTION OF TOPICS IN ALGEBRA AND ENCOURAGED EXPOSITORY PRESENTATIONS AND RESEARCH PAPERS THAT PROVIDE AN INNOVATIVE LINK BETWEEN RESEARCH AREAS OF ALGEBRA AND THE FIELD OF THEIR APPLICATIONS. THIS VOLUME WILL BE USEFUL NOT ONLY TO EXPERTS BUT ALSO TO BEGINNERS OF RESEARCH IN ALGEBRAS AND RELATED TOPICS.

FIRST COURSE IN LINEAR ALGEBRA - PHANI BHUSHAN BHATTACHARYA 1983

FUZZY COMMUTATIVE ALGEBRA - JOHN N MORDESON 1998-12-08

THIS BOOK IS THE FIRST TO BE DEVOTED ENTIRELY TO FUZZY ABSTRACT ALGEBRA. IT PRESENTS AN UP-TO-DATE VERSION OF FUZZY COMMUTATIVE ALGEBRA, AND FOCUSES ON THE CONNECTION BETWEEN L -SUBGROUPS OF A GROUP, AND L -SUBFIELDS OF A FIELD. IN PARTICULAR, AN UP-TO-DATE TREATMENT OF NONLINEAR SYSTEMS OF FUZZY INTERSECTION EQUATIONS IS GIVEN. CONTENTS: L -SUBSETS AND L -SUBGROUPS L -SUBGROUPS OF ABELIAN GROUPS L -SUBRINGS AND L -IDEALS L -SUBMODULES L -SUBFIELDS STRUCTURE OF L -SUBRINGS AND L -IDEALS ALGEBRAIC L -VARIETIES AND INTERSECTION EQUATIONS L -SUBSPACES GALOIS THEORY AND GROUP L -SUBALGEBRAS READERSHIP: PURE MATHEMATICIANS. KEYWORDS: FUZZY SUBSETS; FUZZY SUBGROUPS; FUZZY SUBRINGS; FUZZY IDEALS; FUZZY SUBMODULES; FUZZY SUBFIELDS; FUZZY VARIETIES; FUZZY SUBSPACES; FUZZY GALOIS THEORY; FUZZY GROUP SUBALGEBRAS REVIEWS: "THE BOOK IS SELF-CONTAINED ... THIS WILL SERVE AS A NICE REFERENCE BOOK FOR RESEARCHERS IN THE FIELD. IT MAY ALSO BE USED AS A GOOD TEXT FOR AN ADVANCED GRADUATE COURSE. THERE ARE A GOOD NUMBER OF EXERCISES AT THE END OF EACH CHAPTER OF THE BOOK." MATHEMATICAL REVIEWS

FORMAL HARDWARE VERIFICATION - THOMAS KROPF 1997-08-27

THIS STATE-OF-THE-ART MONOGRAPH PRESENTS A COHERENT SURVEY OF A VARIETY OF METHODS AND SYSTEMS FOR FORMAL HARDWARE VERIFICATION. IT EMPHASIZES THE PRESENTATION OF APPROACHES THAT HAVE MATURED INTO TOOLS AND SYSTEMS USABLE FOR THE ACTUAL VERIFICATION OF NONTRIVIAL CIRCUITS. ALL IN ALL, THE BOOK IS A REPRESENTATIVE AND WELL-STRUCTURED SURVEY ON THE SUCCESS AND FUTURE POTENTIAL OF FORMAL METHODS IN PROVING THE CORRECTNESS OF CIRCUITS. THE VARIOUS CHAPTERS DESCRIBE THE RESPECTIVE APPROACHES SUPPLYING THEORETICAL FOUNDATIONS AS WELL AS TAKING INTO ACCOUNT THE APPLICATION VIEWPOINT. BY APPLYING ALL METHODS AND SYSTEMS PRESENTED TO THE SAME SET OF IFIP WG 10.5 HARDWARE VERIFICATION EXAMPLES, A VALUABLE AND FAIR ANALYSIS OF THE STRENGTHS AND WEAKNESSES OF THE VARIOUS APPROACHES IS GIVEN.

MATHEMATICS FOR MACHINE LEARNING - MARC PETER DEISENROTH 2020-04-23

THE FUNDAMENTAL MATHEMATICAL TOOLS NEEDED TO UNDERSTAND MACHINE LEARNING INCLUDE LINEAR ALGEBRA, ANALYTIC GEOMETRY, MATRIX DECOMPOSITIONS, VECTOR CALCULUS, OPTIMIZATION, PROBABILITY AND STATISTICS. THESE TOPICS ARE TRADITIONALLY

TAUGHT IN DISPARATE COURSES, MAKING IT HARD FOR DATA SCIENCE OR COMPUTER SCIENCE STUDENTS, OR PROFESSIONALS, TO EFFICIENTLY LEARN THE MATHEMATICS. THIS SELF-CONTAINED TEXTBOOK BRIDGES THE GAP BETWEEN MATHEMATICAL AND MACHINE LEARNING TEXTS, INTRODUCING THE MATHEMATICAL CONCEPTS WITH A MINIMUM OF PREREQUISITES. IT USES THESE CONCEPTS TO DERIVE FOUR CENTRAL MACHINE LEARNING METHODS: LINEAR REGRESSION, PRINCIPAL COMPONENT ANALYSIS, GAUSSIAN MIXTURE MODELS AND SUPPORT VECTOR MACHINES. FOR STUDENTS AND OTHERS WITH A MATHEMATICAL BACKGROUND, THESE DERIVATIONS PROVIDE A STARTING POINT TO MACHINE LEARNING TEXTS. FOR THOSE LEARNING THE MATHEMATICS FOR THE FIRST TIME, THE METHODS HELP BUILD INTUITION AND PRACTICAL EXPERIENCE WITH APPLYING MATHEMATICAL CONCEPTS. EVERY CHAPTER INCLUDES WORKED EXAMPLES AND EXERCISES TO TEST UNDERSTANDING. PROGRAMMING TUTORIALS ARE OFFERED ON THE BOOK'S WEB SITE.

ALGEBRA I: A BASIC COURSE IN ABSTRACT ALGEBRA - RAJENDRA KUMAR SHARMA 2011

ALGEBRA IS A COMPULSORY PAPER OFFERED TO THE UNDERGRADUATE STUDENTS OF MATHEMATICS. THE MAJORITY OF UNIVERSITIES OFFER THE SUBJECT AS A TWO /THREE YEAR PAPER OR IN TWO/THREE SEMESTERS. ALGEBRA I: A BASIC COURSE IN ABSTRACT ALGEBRA COVERS THE TOPIC REQUIRED FOR A BASIC COURSE.

A BOOK OF ABSTRACT ALGEBRA - CHARLES C PINTER 2010-01-14

ACCESSIBLE BUT RIGOROUS, THIS OUTSTANDING TEXT ENCOMPASSES ALL OF THE TOPICS COVERED BY A TYPICAL COURSE IN ELEMENTARY ABSTRACT ALGEBRA. ITS EASY-TO-READ TREATMENT OFFERS AN INTUITIVE APPROACH, FEATURING INFORMAL DISCUSSIONS FOLLOWED BY THEMATICALLY ARRANGED EXERCISES. THIS SECOND EDITION FEATURES ADDITIONAL EXERCISES TO IMPROVE STUDENT FAMILIARITY WITH APPLICATIONS. 1990 EDITION.

SOFT SUBRING THEORY UNDER INTERVAL-VALUED NEUTROSOPHIC ENVIRONMENT - SUDIPTA GAYEN 2020-10-01

THE PRIMARY GOAL OF THIS ARTICLE IS TO ESTABLISH AND INVESTIGATE THE IDEA OF INTERVAL-VALUED NEUTROSOPHIC SOFT SUBRING. AGAIN, WE HAVE INTRODUCED FUNCTION UNDER INTERVAL-VALUED NEUTROSOPHIC SOFT ENVIRONMENT AND INVESTIGATED SOME OF ITS HOMOMORPHIC ATTRIBUTES. ADDITIONALLY, WE HAVE ESTABLISHED PRODUCT OF TWO INTERVALVALUED NEUTROSOPHIC SOFT SUBRINGS AND ANALYZED SOME OF ITS FUNDAMENTAL ATTRIBUTES. FURTHERMORE, WE HAVE PRESENTED THE NOTION OF INTERVAL-VALUED NEUTROSOPHIC NORMAL SOFT SUBRING AND INVESTIGATED SOME OF ITS ALGEBRAIC PROPERTIES AND HOMOMORPHIC ATTRIBUTES.

APPLIED MATHEMATICS AND SCIENTIFIC COMPUTING - B. RUSHI KUMAR 2019-02-01

THIS VOLUME IS THE FIRST OF TWO CONTAINING SELECTED PAPERS FROM THE INTERNATIONAL CONFERENCE ON ADVANCES IN MATHEMATICAL SCIENCES (ICAMS), HELD AT THE VELLORE INSTITUTE OF TECHNOLOGY IN DECEMBER 2017. THIS MEETING BROUGHT TOGETHER RESEARCHERS FROM AROUND THE WORLD TO SHARE THEIR WORK, WITH THE AIM OF PROMOTING COLLABORATION AS A MEANS OF SOLVING VARIOUS PROBLEMS IN MODERN SCIENCE AND ENGINEERING. THE AUTHORS OF EACH CHAPTER PRESENT A RESEARCH PROBLEM, TECHNIQUES SUITABLE FOR SOLVING IT, AND A DISCUSSION OF THE RESULTS OBTAINED. THESE VOLUMES WILL BE OF INTEREST TO BOTH THEORETICAL- AND APPLICATION-ORIENTED INDIVIDUALS IN ACADEMIA AND INDUSTRY. PAPERS IN VOLUME I ARE DEDICATED TO ACTIVE AND OPEN AREAS OF RESEARCH IN ALGEBRA, ANALYSIS, OPERATIONS RESEARCH, AND STATISTICS, AND THOSE OF VOLUME II CONSIDER DIFFERENTIAL EQUATIONS, FLUID MECHANICS, AND GRAPH THEORY.

ALGEBRA AND RELATED TOPICS WITH APPLICATIONS - MOHAMMAD ASHRAF 2022-11-30

THIS PROCEEDINGS IS A COLLECTION OF RESEARCH PAPERS ON ALGEBRA AND RELATED TOPICS, MOST OF WHICH WERE PRESENTED AT THE INTERNATIONAL CONFERENCE ON ALGEBRA AND RELATED TOPICS WITH APPLICATIONS (ICARTA-19), HELD AT THE DEPARTMENT OF MATHEMATICS, ALIGARH MUSLIM UNIVERSITY, ALIGARH, INDIA, FROM 17-19 DECEMBER 2019. IT COVERS A WIDE RANGE OF TOPICS ON RING THEORY, CODING THEORY, CRYPTOGRAPHY, AND GRAPH THEORY. IN ADDITION TO HIGHLIGHTING THE LATEST RESEARCH BEING DONE IN ALGEBRA, THE BOOK ALSO ADDRESSES THE ABUNDANT TOPICS OF ALGEBRA PARTICULARLY SEMIGROUPS, GROUPS, DERIVATIONS IN RINGS, RINGS AND MODULES, GROUP RINGS, MATRIX ALGEBRA, TRIANGULAR ALGEBRA, POLYNOMIAL RINGS AND LATTICE THEORY. APART FROM THESE TOPICS, THE BOOK ALSO DISCUSSES APPLICATIONS IN CRYPTOLOGY, CODING THEORY, AND GRAPH THEORY.

FRONTIERS IN INDUSTRIAL AND APPLIED MATHEMATICS - RAJESH KUMAR SHARMA 2023-02-02

THIS BOOK PUBLISHES SELECT PAPERS PRESENTED AT THE 4TH INTERNATIONAL CONFERENCE ON FRONTIERS IN INDUSTRIAL AND APPLIED MATHEMATICS (FIAM-2021), HELD AT THE SANT LONGOWAL INSTITUTE OF ENGINEERING AND TECHNOLOGY, LONGOWAL, PUNJAB, INDIA, FROM 21-22 DECEMBER 2021. MOST OF THE PAPERS DEAL WITH MATHEMATICAL THEORY EMBEDDED WITH ITS APPLICATIONS TO ENGINEERING AND SCIENCES. THIS BOOK ILLUSTRATES NUMERICAL SIMULATION OF SCIENTIFIC PROBLEMS AND THE STATE-OF-THE-ART RESEARCH IN INDUSTRIAL AND APPLIED MATHEMATICS, INCLUDING VARIOUS COMPUTATIONAL AND MODELING TECHNIQUES WITH CASE STUDIES AND CONCRETE EXAMPLES. GRADUATE STUDENTS AND RESEARCHERS, WHO ARE INTERESTED IN REAL APPLICATIONS OF MATHEMATICS IN THE AREAS OF COMPUTATIONAL AND THEORETICAL FLUID DYNAMICS, SOLID MECHANICS, OPTIMIZATION AND OPERATIONS RESEARCH, NUMERICAL ANALYSIS, BIO-MATHEMATICS, FUZZY, CONTROL AND SYSTEMS THEORY, DYNAMICAL SYSTEMS AND NONLINEAR

ANALYSIS, ALGEBRA AND APPROXIMATION THEORY, WILL FIND THE BOOK USEFUL.

BASIC ABSTRACT ALGEBRA - P. B. BHATTACHARYA 1994-11-25

THIS BOOK PROVIDES A COMPLETE ABSTRACT ALGEBRA COURSE, ENABLING INSTRUCTORS TO SELECT THE TOPICS FOR USE IN INDIVIDUAL CLASSES.

ADVANCES IN PURE AND APPLIED ALGEBRA - RATNESH KUMAR MISHRA 2023-04-03

THIS PROCEEDINGS VOLUME DOCUMENTS THE CONTRIBUTIONS PRESENTED AT THE CONIAPS XXVII INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN PURE AND APPLIED ALGEBRA. THE ENTRIES FOCUS ON MODERN TRENDS AND TECHNIQUES IN VARIOUS BRANCHES OF PURE AND APPLIED ALGEBRA AND HIGHLIGHT THEIR APPLICATIONS IN CODING, CRYPTOGRAPHY, GRAPH, AND FUZZY THEORY. THE BOOK COMPRISED A TOTAL OF EIGHTEEN CHAPTERS, AMONG WHICH THE FIRST FOURTEEN CHAPTERS ARE DEVOTED TO ALGEBRA AND RELATED TOPICS, AND THE LAST FOUR CHAPTERS ARE INCLUDED APPLIED MATHEMATICS PARTS. THE CHAPTERS PRESENT THE LATEST RESEARCH WORK BEING DONE ON THE FRONTIERS OF THE VARIOUS BRANCHES OF ALGEBRA AS WELL AS SHOWCASE THE CROSS-FERTILIZATION OF THE IDEAS AND CONNECTION AMONG THESE BRANCHES. COVERING A BROAD RANGE OF TOPICS IN PURE AND APPLIED ALGEBRA, THIS VOLUME WOULD APPEAL TO A WIDE SPECTRUM OF THE RESEARCHER IN MATHEMATICS. THE MAIN AIM OF THIS MONOGRAPH IS TO CONTRIBUTE TO THE RESEARCH IN PURE AND APPLIED ALGEBRA AND HENCE WE PURPOSELY SOUGHT A CROSS-SECTION OF TOPICS IN ALGEBRA AND ENCOURAGED EXPOSITORY PRESENTATIONS AND RESEARCH PAPERS THAT PROVIDE AN INNOVATIVE LINK BETWEEN RESEARCH AREAS OF ALGEBRA AND THE FIELD OF THEIR APPLICATIONS. THIS VOLUME WILL BE USEFUL NOT ONLY TO EXPERTS BUT ALSO TO BEGINNERS OF RESEARCH IN ALGEBRAS AND RELATED TOPICS.

NEUTROSOPHIC SETS AND SYSTEMS, VOL. 36, 2020 - FLORENTIN SMARANDACHE

"NEUTROSOPHIC SETS AND SYSTEMS" HAS BEEN CREATED FOR PUBLICATIONS ON ADVANCED STUDIES IN NEUTROSOPHY, NEUTROSOPHIC SET, NEUTROSOPHIC LOGIC, NEUTROSOPHIC PROBABILITY, NEUTROSOPHIC STATISTICS THAT STARTED IN 1995 AND THEIR APPLICATIONS IN ANY FIELD, SUCH AS THE NEUTROSOPHIC STRUCTURES DEVELOPED IN ALGEBRA, GEOMETRY, TOPOLOGY, ETC. SOME ARTICLES IN THIS ISSUE: N-REFINED NEUTROSOPHIC MODULES, A NEUTROSOPHIC APPROACH TO DIGITAL IMAGES, A NOVEL METHOD FOR NEUTROSOPHIC ASSIGNMENT PROBLEM BY USING INTERVAL-VALUED TRAPEZOIDAL NEUTROSOPHIC NUMBER.

- FREDERICK HOFFMAN 2022-09-13

THIS PROCEEDINGS VOLUME GATHERS SELECTED, REVISED PAPERS PRESENTED AT THE 51ST SOUTHEASTERN INTERNATIONAL CONFERENCE ON COMBINATORICS, GRAPH THEORY AND COMPUTING (SEICCGTC 2020), HELD AT FLORIDA ATLANTIC UNIVERSITY IN BOCA RATON, USA, ON MARCH 9-13, 2020. THE SEICCGTC IS BROADLY CONSIDERED TO BE A TRENDSETTER FOR OTHER CONFERENCES AROUND THE WORLD - MANY OF THE IDEAS AND THEMES FIRST DISCUSSED AT IT HAVE SUBSEQUENTLY BEEN EXPLORED AT OTHER CONFERENCES AND SYMPOSIA. THE CONFERENCE HAS BEEN HELD ANNUALLY SINCE 1970, IN BATON ROUGE, LOUISIANA AND BOCA RATON, FLORIDA. OVER THE YEARS, IT HAS GROWN TO BECOME THE MAJOR ANNUAL CONFERENCE IN ITS FIELDS, AND PLAYS A MAJOR ROLE IN DISSEMINATING RESULTS AND IN FOSTERING COLLABORATIVE WORK. THIS VOLUME IS INTENDED FOR THE COMMUNITY OF PURE AND APPLIED MATHEMATICIANS, IN ACADEMIA, INDUSTRY AND GOVERNMENT, WORKING IN COMBINATORICS AND GRAPH THEORY, AS WELL AS RELATED AREAS OF COMPUTER SCIENCE AND THE INTERACTIONS AMONG THESE FIELDS.

EMERGING SECURITY ALGORITHMS AND TECHNIQUES - KHALEEL AHMAD 2019-05-20

CYBER SECURITY IS THE PROTECTION OF INFORMATION SYSTEMS, HARDWARE, SOFTWARE, AND INFORMATION AS WELL FROM THEFT, DAMAGES, INTERRUPTION OR MISDIRECTION TO ANY OF THESE RESOURCES. IN OTHER WORDS, CYBER SECURITY FOCUSES ON PROTECTING COMPUTERS, NETWORKS, PROGRAMS AND DATA (IN USE, IN REST, IN MOTION) FROM UNAUTHORIZED OR UNINTENDED ACCESS, CHANGE OR DESTRUCTION. THEREFORE, STRENGTHENING THE SECURITY AND RESILIENCE OF CYBERSPACE HAS BECOME A VITAL HOMELAND SECURITY MISSION. CYBER SECURITY ATTACKS ARE GROWING EXPONENTIALLY. SECURITY SPECIALISTS MUST OCCUPY IN THE LAB, CONCOCTING NEW SCHEMES TO PRESERVE THE RESOURCES AND TO CONTROL ANY NEW ATTACKS. THEREFORE, THERE ARE VARIOUS EMERGING ALGORITHMS AND TECHNIQUES VIZ. DES, AES, IDEA, WAKE, CAST5, SERPENT ALGORITHM, CHAOS-BASED CRYPTOGRAPHY McELIECE, NIEDERREITER, NTRU, GOLDBREICH-GOLDWASSER-HALEVI, IDENTITY BASED ENCRYPTION, AND ATTRIBUTE BASED ENCRYPTION. THERE ARE NUMEROUS APPLICATIONS OF SECURITY ALGORITHMS LIKE CYBER SECURITY, WEB SECURITY, E-COMMERCE, DATABASE SECURITY, SMART CARD TECHNOLOGY, MOBILE SECURITY, CLOUD SECURITY, DIGITAL SIGNATURE, ETC. THE BOOK OFFERS COMPREHENSIVE COVERAGE OF THE MOST ESSENTIAL TOPICS, INCLUDING: MODULAR ARITHMETIC, FINITE FIELDS PRIME NUMBER, DLP, INTEGER FACTORIZATION PROBLEM SYMMETRIC CRYPTOGRAPHY ASYMMETRIC CRYPTOGRAPHY POST-QUANTUM CRYPTOGRAPHY IDENTITY BASED ENCRYPTION ATTRIBUTE BASED ENCRYPTION KEY MANAGEMENT ENTITY AUTHENTICATION, MESSAGE AUTHENTICATION DIGITAL SIGNATURES HANDS-ON "SAGEMATH" THIS BOOK SERVES AS A TEXTBOOK/REFERENCE BOOK FOR UG, PG, PhD STUDENTS, TEACHERS, RESEARCHERS AND ENGINEERS IN THE DISCIPLINES OF INFORMATION TECHNOLOGY, COMPUTER SCIENCE AND ENGINEERING, AND ELECTRONICS AND COMMUNICATION ENGINEERING.