

Essentials Of Software Engineering Tsui

WHEN PEOPLE SHOULD GO TO THE EBOOK STORES, SEARCH LAUNCH BY SHOP, SHELF BY SHELF, IT IS IN FACT PROBLEMATIC. THIS IS WHY WE PROVIDE THE BOOK COMPILATIONS IN THIS WEBSITE. IT WILL UNCONDITIONALLY EASE YOU TO SEE GUIDE **ESSENTIALS OF SOFTWARE ENGINEERING TSUI** AS YOU SUCH AS.

BY SEARCHING THE TITLE, PUBLISHER, OR AUTHORS OF GUIDE YOU TRULY 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 TAKE AIM TO DOWNLOAD AND INSTALL THE **ESSENTIALS OF SOFTWARE ENGINEERING TSUI**, IT IS AGREED SIMPLE THEN, BEFORE CURRENTLY WE EXTEND THE JOIN TO PURCHASE AND CREATE BARGAINS TO DOWNLOAD AND INSTALL **ESSENTIALS OF SOFTWARE ENGINEERING TSUI** CORRESPONDINGLY SIMPLE!

FUNDAMENTALS OF SPACECRAFT ATTITUDE DETERMINATION AND CONTROL - F. LANDIS MARKLEY 2014-05-31

THIS BOOK EXPLORES TOPICS THAT ARE CENTRAL TO THE FIELD OF SPACECRAFT ATTITUDE DETERMINATION AND CONTROL. THE AUTHORS PROVIDE RIGOROUS THEORETICAL DERIVATIONS OF SIGNIFICANT ALGORITHMS ACCOMPANIED BY A GENEROUS AMOUNT OF QUALITATIVE DISCUSSIONS OF THE SUBJECT MATTER. THE BOOK DOCUMENTS THE DEVELOPMENT OF THE IMPORTANT CONCEPTS AND METHODS IN A MANNER ACCESSIBLE TO PRACTICING ENGINEERS, GRADUATE-LEVEL

ENGINEERING STUDENTS AND APPLIED MATHEMATICIANS. IT INCLUDES DETAILED EXAMPLES FROM ACTUAL MISSION DESIGNS TO HELP EASE THE TRANSITION FROM THEORY TO PRACTICE AND ALSO PROVIDES PROTOTYPE ALGORITHMS THAT ARE READILY AVAILABLE ON THE AUTHOR'S WEBSITE. SUBJECT MATTER INCLUDES BOTH THEORETICAL DERIVATIONS AND PRACTICAL IMPLEMENTATION OF SPACECRAFT ATTITUDE DETERMINATION AND CONTROL SYSTEMS. IT PROVIDES DETAILED DERIVATIONS FOR ATTITUDE KINEMATICS AND DYNAMICS AND PROVIDES DETAILED DESCRIPTION OF THE MOST

WIDELY USED ATTITUDE PARAMETERIZATION, THE QUATERNION. THIS TITLE ALSO PROVIDES A THOROUGH TREATISE OF ATTITUDE DYNAMICS INCLUDING JACOBIAN ELLIPTICAL FUNCTIONS. IT IS THE FIRST KNOWN BOOK TO PROVIDE DETAILED DERIVATIONS AND EXPLANATIONS OF STATE ATTITUDE DETERMINATION AND GIVES READERS REAL-WORLD EXAMPLES FROM ACTUAL WORKING SPACECRAFT MISSIONS. THE SUBJECT MATTER IS CHOSEN TO FILL THE VOID OF EXISTING TEXTBOOKS AND TREATISES, ESPECIALLY IN STATE AND DYNAMICS ATTITUDE DETERMINATION. MATLAB CODE OF ALL EXAMPLES WILL BE PROVIDED THROUGH AN EXTERNAL WEBSITE.

AN INTRODUCTION TO REHABILITATION ENGINEERING - RORY A COOPER 2006-12-26

ANSWERING THE WIDESPREAD DEMAND FOR AN INTRODUCTORY BOOK ON REHABILITATION ENGINEERING (RE), DR. RORY A. COOPER, A DISTINGUISHED RE AUTHORITY, AND HIS ESTEEMED COLLEAGUES PRESENT AN INTRODUCTION TO REHABILITATION ENGINEERING. THIS RESOURCE INTRODUCES THE FUNDAMENTALS AND APPLICATIONS OF RE AND ASSISTIVE TECHNOLOGIES (ATs). AFTER PROVIDING A

SOFTWARE ENGINEERING - ROGER S. PRESSMAN
2019-09-09

FOR ALMOST FOUR DECADES, SOFTWARE ENGINEERING: A PRACTITIONER'S APPROACH (SEPA) HAS BEEN THE WORLD'S LEADING TEXTBOOK IN SOFTWARE ENGINEERING. THE NINTH

EDITION REPRESENTS A MAJOR RESTRUCTURING AND UPDATE OF PREVIOUS EDITIONS, SOLIDIFYING THE BOOK'S POSITION AS THE MOST COMPREHENSIVE GUIDE TO THIS IMPORTANT SUBJECT.

ESSENTIALS OF SOFTWARE ENGINEERING - FRANK F. TSUI
2014

ESSENTIALS OF SOFTWARE ENGINEERING, THIRD EDITION IS A COMPREHENSIVE, YET CONCISE INTRODUCTION TO THE CORE FUNDAMENTAL TOPICS AND METHODOLOGIES OF SOFTWARE DEVELOPMENT. IDEAL FOR NEW STUDENTS OR SEASONED PROFESSIONALS LOOKING FOR A NEW CAREER IN THE AREA OF SOFTWARE ENGINEERING, THIS TEXT PRESENTS THE COMPLETE LIFE CYCLE OF A SOFTWARE SYSTEM, FROM INCEPTION TO RELEASE AND THROUGH SUPPORT. THE AUTHORS HAVE BROKEN THE TEXT INTO SIX DISTINCT SECTIONS COVERING PROGRAMMING CONCEPTS, SYSTEM ANALYSIS AND DESIGN, PRINCIPLES OF SOFTWARE ENGINEERING, DEVELOPMENT AND SUPPORT PROCESSES, METHODOLOGIES, AND PRODUCT MANAGEMENT. PRESENTING TOPICS EMPHASIZED BY THE IEEE COMPUTER SOCIETY SPONSORED SOFTWARE ENGINEERING BODY OF KNOWLEDGE (SWEBOK) AND BY THE SOFTWARE ENGINEERING 2004 CURRICULUM GUIDELINES FOR UNDERGRADUATE DEGREE PROGRAMS IN SOFTWARE ENGINEERING, THE SECOND EDITION OF ESSENTIALS OF SOFTWARE ENGINEERING IS AN EXCEPTIONAL TEXT FOR THOSE ENTERING THE EXCITING WORLD OF SOFTWARE DEVELOPMENT.

DATABASE PROCESSING - DAVID M. KROENKE 2011-07
GET STRAIGHT TO THE POINT OF DATABASE PROCESSING. DATABASE PROCESSING REFLECTS A NEW TEACHING METHOD THAT GETS READERS STRAIGHT TO THE POINT WITH ITS THOROUGH AND MODERN PRESENTATION OF DATABASE PROCESSING FUNDAMENTALS. THE TWELFTH EDITION HAS BEEN THOROUGHLY UPDATED TO REFLECT THE LATEST SOFTWARE.

SOFTWARE ARCHITECTURE - RICHARD N. TAYLOR
2009-01-09

SOFTWARE ARCHITECTURE IS FOUNDATIONAL TO THE DEVELOPMENT OF LARGE, PRACTICAL SOFTWARE-INTENSIVE APPLICATIONS. THIS BRAND-NEW TEXT COVERS ALL FACETS OF SOFTWARE ARCHITECTURE AND HOW IT SERVES AS THE INTELLECTUAL CENTERPIECE OF SOFTWARE DEVELOPMENT AND EVOLUTION. CRITICALLY, THIS TEXT FOCUSES ON SUPPORTING CREATION OF REAL IMPLEMENTED SYSTEMS. HENCE THE TEXT DETAILS NOT ONLY MODELING TECHNIQUES, BUT DESIGN, IMPLEMENTATION, DEPLOYMENT, AND SYSTEM ADAPTATION -- AS WELL AS A HOST OF OTHER TOPICS -- PUTTING THE ELEMENTS IN CONTEXT AND COMPARING AND CONTRASTING THEM WITH ONE ANOTHER. RATHER THAN FOCUSING ON ONE METHOD, NOTATION, TOOL, OR PROCESS, THIS NEW TEXT/REFERENCE WIDELY SURVEYS SOFTWARE ARCHITECTURE TECHNIQUES, ENABLING THE INSTRUCTOR AND PRACTITIONER TO CHOOSE THE RIGHT TOOL FOR THE JOB AT HAND. SOFTWARE ARCHITECTURE IS INTENDED FOR UPPER-

DIVISION UNDERGRADUATE AND GRADUATE COURSES IN SOFTWARE ARCHITECTURE, SOFTWARE DESIGN, COMPONENT-BASED SOFTWARE ENGINEERING, AND DISTRIBUTED SYSTEMS; THE TEXT MAY ALSO BE USED IN INTRODUCTORY AS WELL AS ADVANCED SOFTWARE ENGINEERING COURSES.

BIOMEDICAL ENGINEERING AND DESIGN HANDBOOK, VOLUME 1
- MYER KUTZ 2009-07-13

A STATE-OF-THE-ART GUIDE TO BIOMEDICAL ENGINEERING AND DESIGN FUNDAMENTALS AND APPLICATIONS THE TWO-VOLUME BIOMEDICAL ENGINEERING AND DESIGN HANDBOOK, SECOND EDITION OFFERS UNSURPASSED COVERAGE OF THE ENTIRE BIOMEDICAL ENGINEERING FIELD, INCLUDING FUNDAMENTAL CONCEPTS, DESIGN AND DEVELOPMENT PROCESSES, AND APPLICATIONS. THIS LANDMARK WORK CONTAINS CONTRIBUTIONS ON A WIDE RANGE OF TOPICS FROM NEARLY 80 LEADING EXPERTS AT UNIVERSITIES, MEDICAL CENTERS, AND COMMERCIAL AND LAW FIRMS. VOLUME 1 FOCUSES ON THE BASICS OF BIOMEDICAL ENGINEERING, INCLUDING BIOMEDICAL SYSTEMS ANALYSIS, BIOMECHANICS OF THE HUMAN BODY, BIOMATERIALS, AND BIOELECTRONICS. FILLED WITH MORE THAN 500 DETAILED ILLUSTRATIONS, THIS SUPERB VOLUME PROVIDES THE FOUNDATIONAL KNOWLEDGE REQUIRED TO UNDERSTAND THE DESIGN AND DEVELOPMENT OF INNOVATIVE DEVICES, TECHNIQUES, AND TREATMENTS. VOLUME 1 COVERS: MODELING AND SIMULATION OF BIOMEDICAL SYSTEMS BIOHEAT TRANSFER PHYSICAL AND

FLOW PROPERTIES OF BLOOD RESPIRATORY MECHANICS AND GAS EXCHANGE BIOMECHANICS OF THE RESPIRATORY MUSCLES BIOMECHANICS OF HUMAN MOVEMENT BIOMECHANICS OF THE MUSCULOSKELETAL SYSTEM BIODYNAMICS BONE MECHANICS FINITE ELEMENT ANALYSIS VIBRATION, MECHANICAL SHOCK, AND IMPACT ELECTROMYOGRAPHY BIOPOLYMERS BIOMEDICAL COMPOSITES BIOCERAMICS CARDIOVASCULAR BIOMATERIALS DENTAL MATERIALS ORTHOPAEDIC BIOMATERIALS BIOMATERIALS TO PROMOTE TISSUE REGENERATION BIOELECTRICITY BIOMEDICAL SIGNAL ANALYSIS BIOMEDICAL SIGNAL PROCESSING INTELLIGENT SYSTEMS AND BIOENGINEERING BIOMEMS

BLITZSCALING - REID HOFFMAN 2018-10-09
FOREWORD BY BILL GATES LINKEDIN COFOUNDER, LEGENDARY INVESTOR, AND HOST OF THE AWARD-WINNING MASTERS OF SCALE PODCAST REVEALS THE SECRET TO STARTING AND SCALING MASSIVELY VALUABLE COMPANIES. WHAT ENTREPRENEUR OR FOUNDER DOESN'T ASPIRE TO BUILD THE NEXT AMAZON, FACEBOOK, OR AIRBNB? YET THOSE WHO ACTUALLY MANAGE TO DO SO ARE EXCEEDINGLY RARE. SO WHAT SEPARATES THE STARTUPS THAT GET DISRUPTED AND DISAPPEAR FROM THE ONES WHO GROW TO BECOME GLOBAL GIANTS? THE SECRET IS BLITZSCALING: A SET OF TECHNIQUES FOR SCALING UP AT A DIZZYING PACE THAT BLOWS COMPETITORS OUT OF THE WATER. THE OBJECTIVE OF BLITZSCALING IS NOT TO GO FROM ZERO TO ONE, BUT FROM

ONE TO ONE BILLION –AS QUICKLY AS POSSIBLE. WHEN GROWING AT A BREAKNECK PACE, GETTING TO NEXT LEVEL REQUIRES VERY DIFFERENT STRATEGIES FROM THOSE THAT GOT YOU TO WHERE YOU ARE TODAY. IN A BOOK INSPIRED BY THEIR POPULAR CLASS AT STANFORD BUSINESS SCHOOL, HOFFMAN AND YEH REVEAL HOW TO NAVIGATE THE NECESSARY SHIFTS AND WEATHER THE UNIQUE CHALLENGES THAT ARISE AT EACH STAGE OF A COMPANY'S LIFE CYCLE, SUCH AS: HOW TO DESIGN BUSINESS MODELS FOR IGNITING AND SUSTAINING RELENTLESS GROWTH; STRATEGIES FOR HIRING AND MANAGING; HOW THE ROLE OF THE FOUNDER AND COMPANY CULTURE MUST EVOLVE AS THE BUSINESS MATURES, AND MORE. WHETHER YOUR BUSINESS HAS TEN EMPLOYEES OR TEN THOUSAND, BLITZSCALING IS THE ESSENTIAL PLAYBOOK FOR WINNING IN A WORLD WHERE SPEED IS THE ONLY COMPETITIVE ADVANTAGE THAT MATTERS.

BEGINNING SOFTWARE ENGINEERING - ROD STEPHENS 2022-10-14
DISCOVER THE FOUNDATIONS OF SOFTWARE ENGINEERING WITH THIS EASY AND INTUITIVE GUIDE IN THE NEWLY UPDATED SECOND EDITION OF BEGINNING SOFTWARE ENGINEERING, EXPERT PROGRAMMER AND TECH EDUCATOR ROD STEPHENS DELIVERS AN INSTRUCTIVE AND INTUITIVE INTRODUCTION TO THE FUNDAMENTALS OF SOFTWARE ENGINEERING. IN THE BOOK, YOU'LL LEARN TO CREATE WELL-CONSTRUCTED SOFTWARE APPLICATIONS THAT MEET THE NEEDS OF USERS WHILE

DEVELOPING THE PRACTICAL, HANDS-ON SKILLS NEEDED TO BUILD ROBUST, EFFICIENT, AND RELIABLE SOFTWARE. THE AUTHOR SKIPS THE UNNECESSARY JARGON AND STICKS TO SIMPLE AND STRAIGHTFORWARD ENGLISH TO HELP YOU UNDERSTAND THE CONCEPTS AND IDEAS DISCUSSED WITHIN. HE ALSO OFFERS YOU REAL-WORLD TESTED METHODS YOU CAN APPLY TO ANY PROGRAMMING LANGUAGE. YOU'LL ALSO GET: PRACTICAL TIPS FOR PREPARING FOR PROGRAMMING JOB INTERVIEWS, WHICH OFTEN INCLUDE QUESTIONS ABOUT SOFTWARE ENGINEERING PRACTICES A NO-NONSENSE GUIDE TO REQUIREMENTS GATHERING, SYSTEM MODELING, DESIGN, IMPLEMENTATION, TESTING, AND DEBUGGING BRAND-NEW COVERAGE OF USER INTERFACE DESIGN, ALGORITHMS, AND PROGRAMMING LANGUAGE CHOICES BEGINNING SOFTWARE ENGINEERING DOESN'T ASSUME ANY EXPERIENCE WITH PROGRAMMING, DEVELOPMENT, OR MANAGEMENT. IT'S PLENTIFUL FIGURES AND GRAPHICS HELP TO EXPLAIN THE FOUNDATIONAL CONCEPTS AND EVERY CHAPTER OFFERS SEVERAL CASE EXAMPLES, TRY IT OUT, AND HOW IT WORKS EXPLANATORY SECTIONS. FOR ANYONE INTERESTED IN A NEW CAREER IN SOFTWARE DEVELOPMENT, OR SIMPLY CURIOUS ABOUT THE SOFTWARE ENGINEERING PROCESS, BEGINNING SOFTWARE ENGINEERING, SECOND EDITION IS THE HANDBOOK YOU'VE BEEN WAITING FOR.

ESSENTIALS OF SOFTWARE ENGINEERING - THEODORE HAMMOND 2018-02-09

SOFTWARE ENGINEERING REFERS TO THE PROCESS OF APPLYING ENGINEERING PRINCIPLES TO DEVELOP SOFTWARE IN A SYSTEMATIC METHOD. IT INCLUDES DEVELOPING, DESIGNING, RESEARCHING, OPERATING AND COMPILING SYSTEM-LEVEL SOFTWARE. THE FIELD IS FURTHER DIVIDED INTO MANY SUB-FIELDS LIKE SOFTWARE TESTING, SOFTWARE QUALITY, SOFTWARE CONSTRUCTION, SOFTWARE DESIGN, ETC. THIS BOOK OUTLINES THE PROCESSES AND APPLICATIONS OF SOFTWARE ENGINEERING IN DETAIL. THE TOPICS INCLUDED IN IT ARE OF UTMOST SIGNIFICANCE AND BOUND TO PROVIDE INCREDIBLE INSIGHTS TO READERS. AS THE FIELD OF SOFTWARE ENGINEERING IS EMERGING AT A RAPID PACE, THE CONTENTS OF THIS BOOK WILL HELP THE READERS UNDERSTAND THE MODERN CONCEPTS AND APPLICATIONS OF THE SUBJECT. THE TEXTBOOK IS APPROPRIATE FOR THOSE SEEKING DETAILED INFORMATION IN THIS AREA.

ESSENTIALS OF SOFTWARE ENGINEERING - FRANK TSUI
2022-01-24

"THE BASIC CONCEPTS AND THEORIES OF SOFTWARE ENGINEERING HAVE STABILIZED CONSIDERABLY FROM THE EARLY DAYS OF THIRTY TO FORTY YEARS AGO. NEVERTHELESS, THE TECHNOLOGY AND TOOLS CONTINUE TO EVOLVE, EXPAND AND IMPROVE EVERY FOUR TO FIVE YEARS. IN THIS FIFTH EDITION, WE WILL COVER SOME OF THESE NEWLY ESTABLISHED IMPROVEMENTS IN TECHNOLOGY AND TOOLS BUT REDUCE SOME AREAS, SUCH AS PROCESS ASSESSMENT MODELS, THAT IS

BECOMING LESS RELEVANT TODAY. WE WILL STILL MAINTAIN MANY OF THE HISTORICALLY IMPORTANT CONCEPTS THAT FORMED THE FOUNDATION TO THIS FIELD, SUCH AS THE TRADITIONAL PROCESS MODELS. OUR GOAL IS TO CONTINUE TO KEEP THE CONTENT OF THIS BOOK TO A CONCISE AMOUNT THAT CAN BE TAUGHT IN A 16-WEEK SEMESTER INTRODUCTORY COURSE"--

DIGITAL TECHNIQUES FOR WIDEBAND RECEIVERS - JAMES B. TSUI 2004-06-30

THIS BOOK IS A CURRENT, COMPREHENSIVE DESIGN GUIDE FOR YOUR DIGITAL PROCESSING WORK WITH TODAY'S COMPLEX RECEIVER SYSTEMS. THIS BOOK BRINGS YOU UP-TO-DATE WITH THE LATEST INFORMATION ON WIDEBAND ELECTRONIC WARFARE RECEIVERS, THE ADC TESTING PROCEDURE, FREQUENCY CHANNELIZATION AND DECODING SCHEMES, AND THE OPERATION OF MONOBIT RECEIVERS.

CREATING Q*BERT AND OTHER CLASSIC VIDEO ARCADE GAMES - WARREN DAVIS 2021-11-30

CREATING Q*BERT AND OTHER CLASSIC VIDEO ARCADE GAMES TAKES YOU INSIDE THE VIDEO ARCADE GAME INDUSTRY DURING THE CLASSIC DECADES OF THE 1980S AND 1990S. WARREN DAVIS, THE CREATOR OF THE GROUNDBREAKING Q*BERT, WORKED AS A MEMBER OF THE CREATIVE TEAMS WHO DEVELOPED SOME OF THE MOST POPULAR VIDEO GAMES OF ALL TIME, INCLUDING JOUST 2, MORTAL KOMBAT, NBA JAM, AND REVOLUTION X. IN A WITTY AND ENTERTAINING

NARRATIVE, DAVIS SHARES INSIGHTFUL STORIES THAT OFFER A BEHIND-THE-SCENES LOOK AT WHAT IT WAS LIKE TO WORK AS A DESIGNER AND PROGRAMMER AT THE MOST INFLUENTIAL AND DOMINANT VIDEO ARCADE GAME MANUFACTURERS OF THE ERA, INCLUDING GOTTLIEB, WILLIAMS/BALLY/MIDWAY, AND PREMIERE. LIKewise, THE TALENTED ARTISTS, DESIGNERS, CREATORS, AND PROGRAMMERS DAVIS HAS COLLABORATED WITH OVER THE YEARS READS LIKE A WHO'S WHO OF VIDEO GAMING HISTORY: EUGENE JARVIS, TIM SKELLY, ED BOON, JEFF LEE, DAVE THIEL, JOHN NEWCOMER, GEORGE PETRO, JACK HAEGAR, AND DENNIS NORDMAN, AMONG MANY OTHERS. THE IMPACT DAVIS HAS HAD ON THE VIDEO ARCADE GAME INDUSTRY IS DEEP AND VARIED. AT WILLIAMS, DAVIS CREATED AND MAINTAINED THE REVOLUTIONARY DIGITIZING SYSTEM THAT ALLOWED ACTORS AND OTHER PHOTO-REALISTIC IMAGERY TO BE UTILIZED IN SUCH GAMES AS MORTAL KOMBAT, T2, AND NBA JAM. WHEN DAVIS WORKED ON THE FABLED US VS. THEM, IT WAS THE FIRST TIME A VIDEO GAME INTEGRATED A LIVE ACTION STORY WITH ARCADE-STYLE GRAPHICS. ON THE ONE-OF-A-KIND EXTERMINATOR, DAVIS DEVELOPED A BRAND NEW VIDEO GAME HARDWARE SYSTEM, AND CREATED A UNIQUE JOYSTICK THAT SENSED BOTH OMNI-DIRECTIONAL MOVEMENT AND ROTATION, A FIRST AT THAT TIME. FOR REVOLUTION X, HE CREATED A DISPLAY SYSTEM THAT SIMULATED A PSEUDO-3D ENVIRONMENT ON 2D HARDWARE, AS WELL AS A TOOL FOR

ARTISTS THAT FACILITATED THE BUILDING OF VIRTUAL WORLDS AND THE SEAMLESS INTEGRATION OF THE ARTIST'S WORK INTO GAME CODE. WHETHER YOU'RE LOOKING FOR INSIGHTS INTO THE GOLDEN AGE OF ARCADES, WOULD LIKE TO LEARN HOW DAVIS FIRST DISCOVERED HIS DESIGN AND PROGRAMMING SKILLS AS A TEENAGER WORKING WITH A 1960S COMPUTER CALLED A MONROBOT XI, OR WANT TO GET THE INSIDE SCOOP ON WHAT IT WAS LIKE TO FILM THE ROCK AND ROLL HALL OF FAME BAND AEROSMITH FOR REVOLUTION X, DAVIS'S MEMOIR PROVIDES A BACKSTAGE TOUR OF THE ARCADE AND VIDEO GAME INDUSTRY DURING ITS MOST DEFINITIVE AND INFLUENTIAL PERIOD.

SOFTWARE ENGINEERING FRAMEWORKS FOR THE CLOUD COMPUTING PARADIGM - ZAIGHAM MAHMOOD 2013-04-19
THIS BOOK PRESENTS THE LATEST RESEARCH ON SOFTWARE ENGINEERING FRAMEWORKS FOR THE CLOUD COMPUTING PARADIGM, DRAWN FROM AN INTERNATIONAL SELECTION OF RESEARCHERS AND PRACTITIONERS. THE BOOK OFFERS BOTH A DISCUSSION OF RELEVANT SOFTWARE ENGINEERING APPROACHES AND PRACTICAL GUIDANCE ON ENTERPRISE-WIDE SOFTWARE DEPLOYMENT IN THE CLOUD ENVIRONMENT, TOGETHER WITH REAL-WORLD CASE STUDIES. FEATURES:
PRESENTS THE STATE OF THE ART IN SOFTWARE ENGINEERING APPROACHES FOR DEVELOPING CLOUD-SUITABLE APPLICATIONS; DISCUSSES THE IMPACT OF THE CLOUD COMPUTING PARADIGM ON SOFTWARE ENGINEERING; OFFERS

GUIDANCE AND BEST PRACTICES FOR STUDENTS AND PRACTITIONERS; EXAMINES THE STAGES OF THE SOFTWARE DEVELOPMENT LIFECYCLE, WITH A FOCUS ON THE REQUIREMENTS ENGINEERING AND TESTING OF CLOUD-BASED APPLICATIONS; REVIEWS THE EFFICIENCY AND PERFORMANCE OF CLOUD-BASED APPLICATIONS; EXPLORES FEATURE-DRIVEN AND CLOUD-AIDED SOFTWARE DESIGN; PROVIDES RELEVANT THEORETICAL FRAMEWORKS, PRACTICAL APPROACHES AND FUTURE RESEARCH DIRECTIONS.

FUNDAMENTALS OF COMPUTER PROGRAMMING WITH C# - SVETLIN NAKOV 2013-09-01

THE FREE BOOK "FUNDAMENTALS OF COMPUTER PROGRAMMING WITH C#" IS A COMPREHENSIVE COMPUTER PROGRAMMING TUTORIAL THAT TEACHES PROGRAMMING, LOGICAL THINKING, DATA STRUCTURES AND ALGORITHMS, PROBLEM SOLVING AND HIGH QUALITY CODE WITH LOTS OF EXAMPLES IN C#. IT STARTS WITH THE FIRST STEPS IN PROGRAMMING AND SOFTWARE DEVELOPMENT LIKE VARIABLES, DATA TYPES, CONDITIONAL STATEMENTS, LOOPS AND ARRAYS AND CONTINUES WITH OTHER BASIC TOPICS LIKE METHODS, NUMERAL SYSTEMS, STRINGS AND STRING PROCESSING, EXCEPTIONS, CLASSES AND OBJECTS. AFTER THE BASICS THIS FUNDAMENTAL PROGRAMMING BOOK ENTERS INTO MORE ADVANCED PROGRAMMING TOPICS LIKE RECURSION, DATA STRUCTURES (LISTS, TREES, HASH-TABLES AND GRAPHS), HIGH-QUALITY CODE, UNIT TESTING AND REFACTORING,

OBJECT-ORIENTED PRINCIPLES (INHERITANCE, ABSTRACTION, ENCAPSULATION AND POLYMORPHISM) AND THEIR IMPLEMENTATION THE C# LANGUAGE. IT ALSO COVERS FUNDAMENTAL TOPICS THAT EACH GOOD DEVELOPER SHOULD KNOW LIKE ALGORITHM DESIGN, COMPLEXITY OF ALGORITHMS AND PROBLEM SOLVING. THE BOOK USES C# LANGUAGE AND VISUAL STUDIO TO ILLUSTRATE THE PROGRAMMING CONCEPTS AND EXPLAINS SOME C# / .NET SPECIFIC TECHNOLOGIES LIKE LAMBDA EXPRESSIONS, EXTENSION METHODS AND LINQ. THE BOOK IS WRITTEN BY A TEAM OF DEVELOPERS LEAD BY SVETLIN NAKOV WHO HAS 20+ YEARS PRACTICAL SOFTWARE DEVELOPMENT EXPERIENCE. IT TEACHES THE MAJOR PROGRAMMING CONCEPTS AND WAY OF THINKING NEEDED TO BECOME A GOOD SOFTWARE ENGINEER AND THE C# LANGUAGE IN THE MEANTIME. IT IS A GREAT START FOR ANYONE WHO WANTS TO BECOME A SKILLFUL SOFTWARE ENGINEER. THE BOOKS DOES NOT TEACH TECHNOLOGIES LIKE DATABASES, MOBILE AND WEB DEVELOPMENT, BUT SHOWS THE TRUE WAY TO MASTER THE BASICS OF PROGRAMMING REGARDLESS OF THE LANGUAGES, TECHNOLOGIES AND TOOLS. IT IS GOOD FOR BEGINNERS AND INTERMEDIATE DEVELOPERS WHO WANT TO PUT A SOLID BASE FOR A SUCCESSFUL CAREER IN THE SOFTWARE ENGINEERING INDUSTRY. THE BOOK IS ACCOMPANIED BY FREE VIDEO LESSONS, PRESENTATION SLIDES AND MIND MAPS, AS WELL AS HUNDREDS OF EXERCISES AND LIVE EXAMPLES. DOWNLOAD THE FREE C# PROGRAMMING

BOOK, VIDEOS, PRESENTATIONS AND OTHER RESOURCES FROM [HTTP://INTROPROGRAMMING.INFO](http://introprogramming.info). TITLE: FUNDAMENTALS OF COMPUTER PROGRAMMING WITH C# (THE BULGARIAN C# PROGRAMMING BOOK) ISBN: 9789544007737 ISBN-13: 978-954-400-773-7 (9789544007737) ISBN-10: 954-400-773-3 (9544007733) AUTHOR: SVETLIN NAKOV & Co. PAGES: 1132 LANGUAGE: ENGLISH PUBLISHED: SOFIA, 2013 PUBLISHER: FABER PUBLISHING, BULGARIA WEB SITE: [HTTP://WWW.INTROPROGRAMMING.INFO](http://www.introprogramming.info) LICENSE: CC-ATTRIBUTION-SHARE-ALIKE TAGS: FREE, PROGRAMMING, BOOK, COMPUTER PROGRAMMING, PROGRAMMING FUNDAMENTALS, EBOOK, BOOK PROGRAMMING, C#, CSHARP, C# BOOK, TUTORIAL, C# TUTORIAL; PROGRAMMING CONCEPTS, PROGRAMMING FUNDAMENTALS, COMPILER, VISUAL STUDIO, .NET, .NET FRAMEWORK, DATA TYPES, VARIABLES, EXPRESSIONS, STATEMENTS, CONSOLE, CONDITIONAL STATEMENTS, CONTROL-FLOW LOGIC, LOOPS, ARRAYS, NUMERAL SYSTEMS, METHODS, STRINGS, TEXT PROCESSING, STRINGBUILDER, EXCEPTIONS, EXCEPTION HANDLING, STACK TRACE, STREAMS, FILES, TEXT FILES, LINEAR DATA STRUCTURES, LIST, LINKED LIST, STACK, QUEUE, TREE, BALANCED TREE, GRAPH, DEPTH-FIRST SEARCH, DFS, BREADTH-FIRST SEARCH, BFS, DICTIONARIES, HASH TABLES, ASSOCIATIVE ARRAYS, SETS, ALGORITHMS, SORTING ALGORITHM, SEARCHING ALGORITHMS, RECURSION, COMBINATORIAL ALGORITHMS, ALGORITHM COMPLEXITY,

OOP, OBJECT-ORIENTED PROGRAMMING, CLASSES, OBJECTS, CONSTRUCTORS, FIELDS, PROPERTIES, STATIC MEMBERS, ABSTRACTION, INTERFACES, ENCAPSULATION, INHERITANCE, VIRTUAL METHODS, POLYMORPHISM, COHESION, COUPLING, ENUMERATIONS, GENERICS, NAMESPACES, UML, DESIGN PATTERNS, EXTENSION METHODS, ANONYMOUS TYPES, LAMBDA EXPRESSIONS, LINQ, CODE QUALITY, HIGH-QUALITY CODE, HIGH-QUALITY CLASSES, HIGH-QUALITY METHODS, CODE FORMATTING, SELF-DOCUMENTING CODE, CODE REFACTORING, PROBLEM SOLVING, PROBLEM SOLVING METHODOLOGY, 9789544007737, 9544007733

GUIDE TO THE SOFTWARE ENGINEERING BODY OF KNOWLEDGE
- ALAIN ABRAN 2004

THE PURPOSE OF THE GUIDE TO THE SOFTWARE ENGINEERING BODY OF KNOWLEDGE IS TO PROVIDE A VALIDATED CLASSIFICATION OF THE BOUNDS OF THE SOFTWARE ENGINEERING DISCIPLINE AND TOPICAL ACCESS THAT WILL SUPPORT THIS DISCIPLINE. THE BODY OF KNOWLEDGE IS SUBDIVIDED INTO TEN SOFTWARE ENGINEERING KNOWLEDGE AREAS (KA) THAT DIFFERENTIATE AMONG THE VARIOUS IMPORTANT CONCEPTS, ALLOWING READERS TO FIND THEIR WAY QUICKLY TO SUBJECTS OF INTEREST. UPON FINDING A SUBJECT, READERS ARE REFERRED TO KEY PAPERS OR BOOK CHAPTERS. EMPHASES ON ENGINEERING PRACTICE LEAD THE GUIDE TOWARD A STRONG RELATIONSHIP WITH THE NORMATIVE LITERATURE. THE NORMATIVE LITERATURE IS

VALIDATED BY CONSENSUS FORMED AMONG PRACTITIONERS AND IS CONCENTRATED IN STANDARDS AND RELATED DOCUMENTS. THE TWO MAJOR STANDARDS BODIES FOR SOFTWARE ENGINEERING (IEEE COMPUTER SOCIETY SOFTWARE AND SYSTEMS ENGINEERING STANDARDS COMMITTEE AND ISO/IEC JTC1/SC7) ARE REPRESENTED IN THE PROJECT.

DEEP LEARNING ON GRAPHS - YAO MA 2021-09-23

A COMPREHENSIVE TEXT ON FOUNDATIONS AND TECHNIQUES OF GRAPH NEURAL NETWORKS WITH APPLICATIONS IN NLP, DATA MINING, VISION AND HEALTHCARE.

ESSENTIALS OF SOFTWARE ENGINEERING, 3RD EDITION - TSUI 2013

UPDATED WITH NEW CASE STUDIES AND CONTENT, THE FULLY REVISED THIRD EDITION OF ESSENTIALS OF SOFTWARE ENGINEERING OFFERS A COMPREHENSIVE, ACCESSIBLE, AND CONCISE INTRODUCTION TO CORE TOPICS AND METHODOLOGIES OF SOFTWARE DEVELOPMENT. DESIGNED FOR UNDERGRADUATE STUDENTS IN INTRODUCTORY COURSES, THE TEXT COVERS ALL ESSENTIAL TOPICS EMPHASIZED BY THE IEEE COMPUTER SOCIETY-SPONSORED SOFTWARE ENGINEERING BODY OF KNOWLEDGE (SWEBOK). IN-DEPTH COVERAGE OF KEY ISSUES, COMBINED WITH A STRONG FOCUS ON SOFTWARE QUALITY, MAKES ESSENTIALS OF SOFTWARE ENGINEERING, THIRD EDITION THE PERFECT TEXT FOR STUDENTS ENTERING THE FAST-GROWING AND LUCRATIVE FIELD OF

SOFTWARE DEVELOPMENT. THE TEXT INCLUDES THOROUGH OVERVIEWS OF PROGRAMMING CONCEPTS, SYSTEM ANALYSIS AND DESIGN, PRINCIPLES OF SOFTWARE ENGINEERING, DEVELOPMENT AND SUPPORT PROCESSES, METHODOLOGIES, AND PRODUCT MANAGEMENT. THE REVISED AND UPDATED THIRD EDITION INCLUDES ALL-NEW SECTIONS ON SCRUM AND HTML-SCRIPT-SQL DESIGN EXAMPLES, AS WELL AS EXPANDED DISCUSSIONS OF USER-INTERFACE DESIGN, FLOW OF INTERACTIONS, COGNITIVE MODELS, AND OTHER UI DESIGN ISSUES. COVERING ALL PHASES OF THE SOFTWARE PRODUCTION LIFECYCLE AND EMPHASIZING QUALITY THROUGHOUT, ESSENTIALS OF SOFTWARE ENGINEERING IS A SUPERB RESOURCE FOR STUDENTS OF SOFTWARE ENGINEERING. KEY FEATURES: " REVISED AND FULLY UPDATED THROUGHOUT, WITH ALL-NEW SECTIONS ON SCRUM AND HTML-SCRIPT-SQL DESIGN EXAMPLES, AS WELL AS EXPANDED DISCUSSIONS OF OTHER CENTRAL TOPICS " PROVIDES COVERAGE OF ALL ESSENTIAL TOPICS EMPHASIZED BY SWEBOK " COVERS ESSENTIAL TOPICS REQUIRED FOR STUDENTS TO COMPLETE INDIVIDUAL AND TEAM PROJECTS IN AN AFFORDABLE AND ACCESSIBLE PAPERBACK FORMAT." CONTAINS AN ALL-NEW APPENDIX WITH EXAMPLES OF ESSENTIAL SOFTWARE DEVELOPMENT PLAN (SDP), ESSENTIAL SOFTWARE REQUIREMENTS SPECIFICATIONS (SRS), ESSENTIAL SOFTWARE DESIGN, AND ESSENTIAL TEST PLAN " ACCOMPANIED BY A FULL SUITE OF INSTRUCTOR

SUPPORT MATERIAL, INCLUDING ANSWERS TO THE END-OF-CHAPTER QUESTIONS, POWERPOINT LECTURE OUTLINES, AND A COMPLETE TEST BANK.

ESSENTIAL ISSUES IN SOC DESIGN - YOUNG-LONG STEVE LIN
2007-05-31

THIS BOOK ORIGINATED FROM A WORKSHOP HELD AT THE DATE 2005 CONFERENCE, NAMELY DESIGNING COMPLEX SOCs. STATE-OF-THE-ART IN ISSUES RELATED TO SYSTEM-ON-CHIP (SoC) DESIGN BY LEADING EXPERTS IN THE FIELDS, IT COVERS IP DEVELOPMENT, VERIFICATION, INTEGRATION, CHIP IMPLEMENTATION, TESTING AND SOFTWARE. IT CONTAINS VALUABLE ACADEMIC AND INDUSTRIAL EXAMPLES FOR THOSE INVOLVED WITH THE DESIGN OF COMPLEX SOCs.

MANAGING SYSTEMS AND IT PROJECTS - FRANK TSUI
2011-08-24

THIS BOOK IS DESIGNED FOR SOFTWARE ENGINEERING STUDENTS AND PROJECT MANAGEMENT PROFESSIONAL IN THE IT AND SOFTWARE INDUSTRY. IT FOCUSES ON THE FOUR PHASES OF MANAGEMENT -- PLANNING, ORGANIZING, MONITORING, AND ADJUSTING (POMA) -- AND TAILORS TO SYSTEMS AND APPLICATIONS ON SOFTWARE PROJECTS. THE TASKS AND TECHNIQUES UTILIZED IN EACH OF THE POMA MANAGEMENT PHASES ARE DISCUSSED WITH SPECIFIC SOFTWARE ENGINEERING AND IT RELATED EXAMPLES. DRAWING FROM YEARS OF EXPERIENCE IN THE INDUSTRY, THE AUTHOR PRESENTS MATERIAL WITHIN A FRAMEWORK OF REAL-WORLD

EXAMPLES AND EXERCISES THAT HELP READERS APPLY NEW CONCEPTS TO EVERYDAY SITUATIONS.

FUNDAMENTALS OF GLOBAL POSITIONING SYSTEM RECEIVERS

- JAMES BAO-YEN TSUI 2005-01-03

ALL THE EXPERT GUIDANCE YOU NEED TO UNDERSTAND, BUILD, AND OPERATE GPS RECEIVERS THE SECOND EDITION OF THIS ACCLAIMED PUBLICATION ENABLES READERS TO UNDERSTAND AND APPLY THE COMPLEX OPERATION PRINCIPLES OF GLOBAL POSITIONING SYSTEM (GPS) RECEIVERS. ALTHOUGH GPS RECEIVERS ARE WIDELY USED IN EVERYDAY LIFE TO AID IN POSITIONING AND NAVIGATION, THIS IS THE ONLY TEXT THAT IS DEVOTED TO COMPLETE COVERAGE OF THEIR OPERATION PRINCIPLES. THE AUTHOR, ONE OF THE FOREMOST AUTHORITIES IN THE GPS FIELD, PRESENTS THE MATERIAL FROM A SOFTWARE RECEIVER VIEWPOINT, AN APPROACH THAT HELPS READERS BETTER UNDERSTAND OPERATION AND THAT REFLECTS THE FORECASTED INTEGRATION OF GPS RECEIVERS INTO SUCH EVERYDAY DEVICES AS CELLULAR TELEPHONES. CONCENTRATING ON CIVILIAN C/A CODE, THE BOOK PROVIDES THE TOOLS AND INFORMATION NEEDED TO UNDERSTAND AND EXPLOIT ALL ASPECTS OF RECEIVER TECHNOLOGY AS WELL AS RELEVANT NAVIGATION SCHEMES: OVERVIEW OF GPS BASICS AND THE CONSTELLATION OF SATELLITES THAT COMPRISE THE GPS SYSTEM DETAILED EXAMINATION OF GPS SIGNAL STRUCTURE, ACQUISITION, AND TRACKING STEP-BY-STEP PRESENTATION OF THE

MATHEMATICAL FORMULAS FOR CALCULATING A USER'S POSITION DEMONSTRATION OF THE USE OF COMPUTER PROGRAMS TO RUN KEY EQUATIONS INSTRUCTIONS FOR DEVELOPING HARDWARE TO COLLECT DIGITIZED DATA FOR A SOFTWARE GPS RECEIVER COMPLETE CHAPTER DEMONSTRATING A GPS RECEIVER FOLLOWING A SIGNAL FLOW TO DETERMINE A USER'S POSITION THE SECOND EDITION OF THIS HIGHLY ACCLAIMED TEXT HAS BEEN GREATLY EXPANDED, INCLUDING THREE NEW CHAPTERS: ACQUISITION OF WEAK SIGNALS TRACKING OF WEAK SIGNALS GPS RECEIVER RELATED SUBJECTS FOLLOWING THE AUTHOR'S EXPERT GUIDANCE AND EASY-TO-FOLLOW STYLE, ENGINEERS AND SCIENTISTS LEARN ALL THAT IS NEEDED TO UNDERSTAND, BUILD, AND OPERATE GPS RECEIVERS. THE BOOK'S LOGICAL FLOW FROM BASIC CONCEPTS TO APPLICATIONS MAKES IT AN EXCELLENT TEXTBOOK FOR UPPER-LEVEL UNDERGRADUATE AND GRADUATE STUDENTS IN ELECTRICAL ENGINEERING, WIRELESS COMMUNICATIONS, AND COMPUTER SCIENCE.

A SOFTWARE-DEFINED GPS AND GALILEO RECEIVER - KAI BORRE 2007-08-03

THIS BOOK EXPLORES THE USE OF NEW TECHNOLOGIES IN THE AREA OF SATELLITE NAVIGATION RECEIVERS. IN ORDER TO CONSTRUCT A RECONFIGURABLE RECEIVER WITH A WIDE RANGE OF APPLICATIONS, THE AUTHORS DISCUSS RECEIVER ARCHITECTURE BASED ON SOFTWARE-DEFINED RADIO TECHNIQUES. THE PRESENTATION UNFOLDS IN A USER-FRIENDLY

STYLE AND GOES FROM THE BASICS TO CUTTING-EDGE RESEARCH. THE BOOK IS AIMED AT APPLIED MATHEMATICIANS, ELECTRICAL ENGINEERS, GEODESISTS, AND GRADUATE STUDENTS. IT MAY BE USED AS A TEXTBOOK IN VARIOUS GPS TECHNOLOGY AND SIGNAL PROCESSING COURSES, OR AS A SELF-STUDY REFERENCE FOR ANYONE WORKING WITH SATELLITE NAVIGATION RECEIVERS.

ESSENTIALS OF SOFTWARE ENGINEERING - FRANK F. TSUI
2016-12-05

WRITTEN FOR THE UNDERGRADUATE, ONE-TERM COURSE, *ESSENTIALS OF SOFTWARE ENGINEERING*, FOURTH EDITION PROVIDES STUDENTS WITH A SYSTEMATIC ENGINEERING APPROACH TO SOFTWARE ENGINEERING PRINCIPLES AND METHODOLOGIES. COMPREHENSIVE, YET CONCISE, THE FOURTH EDITION INCLUDES NEW INFORMATION ON AREAS OF HIGH INTEREST TO COMPUTER SCIENTISTS, INCLUDING BIG DATA AND DEVELOPING IN THE CLOUD.

NANOINDENTATION - ANTHONY C. FISCHER-CRIPPS
2013-06-29

MECHANICAL ENGINEERING, AN ENGINEERING DISCIPLINE BORNE OF THE NEEDS OF THE INDUSTRIAL REVOLUTION, IS ONCE AGAIN ASKED TO DO ITS SUBSTANTIAL SHARE IN THE CALL FOR INDUSTRIAL RENEWAL. THE GENERAL CALL IS URGENT AS WE FACE PROFOUND ISSUES OF PRODUCTIVITY AND COMPETITIVENESS THAT REQUIRE ENGINEERING SOLUTIONS, AMONG OTHERS. THE MECHANICAL ENGINEERING SERIES

FEATURES GRADUATE TEXTS AND RESEARCH MONOGRAPHS INTENDED TO ADDRESS THE NEED FOR INFORMATION IN CONTEMPORARY AREAS OF MECHANICAL ENGINEERING. THE SERIES IS CONCEIVED AS A COMPREHENSIVE ONE THAT COVERS A BROAD RANGE OF CONCENTRATIONS IMPORTANT TO MECHANICAL ENGINEERING GRADUATE EDUCATION AND RESEARCH. WE ARE FORTUNATE TO HAVE A DISTINGUISHED ROSTER OF CONSULTING EDITORS ON THE ADVISORY BOARD, EACH AN EXPERT IN ONE OF THE AREAS OF CONCENTRATION. THE NAMES OF THE CONSULTING EDITORS ARE LISTED ON THE FACING PAGE OF THIS VOLUME. THE AREAS OF CONCENTRATION ARE: APPLIED MECHANICS; BIOMECHANICS; COMPUTATIONAL MECHANICS; DYNAMIC SYSTEMS AND CONTROL; ENERGETICS; MECHANICS OF MATERIALS; PROCESSING; THERMAL SCIENCE; AND TRIBOLOGY.

SERVICE DESIGN AND DELIVERY - MAIRI MACINTYRE
2011-04-02

SERVICE DESIGN AND DELIVERY PROVIDES A COMPREHENSIVE OVERVIEW OF THE INCREASINGLY IMPORTANT ROLE PLAYED BY THE SERVICE INDUSTRY. FOCUSING ON THE DEVELOPMENT OF DIFFERENT PROCESSES EMPLOYED BY SERVICE ORGANIZATIONS, THE BOOK EMPHASIZES MANAGEMENT OF SERVICE IN RELATION TO PRODUCTS. IT NOT ONLY EXPLORES THE COMPLEXITY OF THIS RELATIONSHIP, BUT ALSO INTRODUCES STRATEGIES USED IN THE DESIGN AND MANAGEMENT OF SERVICE ACROSS VARIOUS SECTORS, HIGHLIGHTING WHERE TOOLS, TECHNIQUES AND

PROCESSES APPLICABLE TO ONE SECTOR MAY PROVE USEFUL IN ANOTHER. THE IMPLEMENTATION METHODS INTRODUCED IN THE BOOK ALSO ILLUSTRATE HOW AND WHY COMPANIES CAN TRANSFORM THEMSELVES INTO SERVICE ORGANIZATIONS. WHILE THE BOOK IS PRIMARILY INTENDED AS A TEXT FOR ADVANCED-LEVEL COURSES IN SERVICE DESIGN AND DELIVERY, IT ALSO CONTAINS THEORETICAL AND PRACTICAL KNOWLEDGE BENEFICIAL TO BOTH PRACTITIONERS IN THE SERVICE SECTOR AND THOSE IN MANUFACTURING CONTEMPLATING MOVING TOWARDS SERVICE DELIVERY.

ESSENTIALS OF SOFTWARE ENGINEERING - FRANK F. TSUI
2007

INTENDED FOR A ONE-SEMESTER, INTRODUCTORY COURSE, *ESSENTIALS OF SOFTWARE ENGINEERING* IS A USER-FRIENDLY, COMPREHENSIVE INTRODUCTION TO THE CORE FUNDAMENTAL TOPICS AND METHODOLOGIES OF SOFTWARE DEVELOPMENT. THE AUTHORS, BUILDING OFF THEIR 25 YEARS OF EXPERIENCE, PRESENT THE COMPLETE LIFE CYCLE OF A SOFTWARE SYSTEM, FROM INCEPTION TO RELEASE AND THROUGH SUPPORT. THE TEXT IS BROKEN INTO SIX DISTINCT SECTIONS, COVERING PROGRAMMING CONCEPTS, SYSTEM ANALYSIS AND DESIGN, PRINCIPLES OF SOFTWARE ENGINEERING, DEVELOPMENT AND SUPPORT PROCESSES, METHODOLOGIES, AND PRODUCT MANAGEMENT. PRESENTING TOPICS EMPHASIZED BY THE IEEE COMPUTER SOCIETY SPONSORED SOFTWARE ENGINEERING BODY OF KNOWLEDGE (SWEBOK) AND BY THE SOFTWARE

ENGINEERING 2004 CURRICULUM GUIDELINES FOR UNDERGRADUATE DEGREE PROGRAMS IN SOFTWARE ENGINEERING, *ESSENTIALS OF SOFTWARE ENGINEERING* IS THE IDEAL TEXT FOR STUDENTS ENTERING THE WORLD OF SOFTWARE DEVELOPMENT.

INTRODUCTION TO JAVA PROGRAMMING - Y. DANIEL LIANG
2005

USING A STEP-BY-STEP APPROACH THAT FOSTERS SELF-TEACHING, LIANG PRESENTS JAVA PROGRAMMING IN FOUR PARTS. THE EARLY CHAPTERS OUTLINE THE CONCEPTUAL BASIS FOR UNDERSTANDING JAVA. SUBSEQUENT CHAPTERS PROGRESSIVELY PRESENT JAVA PROGRAMMING IN DETAIL, CULMINATING WITH THE DEVELOPMENT OF COMPREHENSIVE JAVA APPLICATIONS. REVISED IN EVERY DETAIL TO ENHANCE CLARITY, CONTENT, PRESENTATION, EXAMPLES, AND EXERCISES. UPDATED TO JSE 5.0 FEATURES MANY NEW ILLUSTRATIONS AND SHORT EXAMPLES THROUGHOUT TO DEMONSTRATE CONCEPTS AND TECHNIQUES. PRESENTS LARGE EXAMPLES IN CASE STUDIES WITH OVERALL DISCUSSIONS AND THOROUGH LINE-BY-LINE EXPLANATIONS. EXPANDS TREATMENT OF OBJECT-ORIENTED PROGRAMMING AND GUI PROGRAMMING. FEATURES EXCELLENT COVERAGE OF ADVANCED TOPICS IN THE NEW COMPREHENSIVE VERSION, INCLUDING: EXCEPTIONS, DATA STRUCTURES, MULTITHREADING, JAVA BEANS, MVC, CONTAINERS, ADVANCED SWING, DATABASE PROGRAMMING, SERVLETS,

JAVASERVER PAGES, NETWORKING, AND REMOTE METHOD INVOCATION. IDEAL TUTORIAL/REFERENCE FOR PROGRAMMERS WHO WANT TO LEARN MORE ABOUT JAVA.

ENCYCLOPEDIA OF COMPUTER SCIENCE - ANTHONY RALSTON
2003-08-29

THE ENCYCLOPEDIA OF COMPUTER SCIENCE IS THE DEFINITIVE REFERENCE IN COMPUTER SCIENCE AND TECHNOLOGY. FIRST PUBLISHED IN 1976, IT IS STILL THE ONLY SINGLE VOLUME TO COVER EVERY MAJOR ASPECT OF THE FIELD. NOW IN ITS FOURTH EDITION, THIS INFLUENTIAL WORK PROVIDES AN HISTORICAL TIMELINE HIGHLIGHTING THE KEY BREAKTHROUGHS IN COMPUTER SCIENCE AND TECHNOLOGY, AS WELL AS CLEAR AND CONCISE EXPLANATIONS OF THE LATEST TECHNOLOGY AND ITS PRACTICAL APPLICATIONS. ITS UNIQUE BLEND OF HISTORICAL PERSPECTIVE, CURRENT KNOWLEDGE AND PREDICTED FUTURE TRENDS HAS EARNED IT ITS RICHLY DESERVED REPUTATION AS AN UNRIVALLED REFERENCE CLASSIC. WHAT SETS THE ENCYCLOPEDIA APART FROM OTHER REFERENCE SOURCES IS THE COMPREHENSIVENESS OF EACH OF ITS ENTRIES. ENCOMPASSING FAR MORE THAN MERE DEFINITIONS, EACH ARTICLE ELABORATES ON A TOPIC GIVING A REMARKABLE BREADTH AND DEPTH OF COVERAGE. THE VISUAL IMPACT OF THE VOLUME IS ENHANCED WITH A 16 PAGE COLOUR INSERT SPOTLIGHTING ADVANCED COMPUTER APPLICATIONS AND COMPUTER-GENERATED GRAPHICS TECHNOLOGY. IN ADDITION, THE TEXT IS ENLIVENED WITH

FIGURES, TABLES, DIAGRAMS, ILLUSTRATIONS AND PHOTOGRAPHS. WITH CONTRIBUTIONS FROM OVER 300 INTERNATIONAL EXPERTS, THE 4TH EDITION CONTAINS OVER 100 COMPLETELY NEW ARTICLES RANGING FROM ARTIFICIAL LIFE TO COMPUTER ETHICS, DATA MINING TO JAVA, MOBILE COMPUTING TO QUANTUM COMPUTING AND SOFTWARE SAFETY TO THE WORLD WIDE WEB. IN ADDITION, EACH OF THE MORE THAN 600 ARTICLES HAVE BEEN EXTENSIVELY REVISED, EXPANDED AND UPDATED TO REFLECT THE LATEST DEVELOPMENTS IN COMPUTER SCIENCE AND TECHNOLOGY. INTELLIGENTLY AND THOUGHTFULLY ORGANISED, ALL THE ARTICLES ARE CLASSIFIED AROUND 9 MAIN THEMES HARDWARE SOFTWARE COMPUTER SYSTEMS INFORMATION AND DATA MATHEMATICS OF COMPUTING THEORY OF COMPUTATION METHODOLOGIES APPLICATIONS COMPUTING MILIEUX WITHIN EACH OF THESE MAJOR HEADINGS ARE A WEALTH OF ARTICLES THAT PROVIDE THE READER WITH CONCISE YET THOROUGH COVERAGE OF THE TOPIC. IN ADDITION, CROSS-REFERENCES ARE INCLUDED AT THE BEGINNING OF EACH ARTICLE, DIRECTING THE READER IMMEDIATELY TO RELATED MATERIAL. IN ADDITION THE ENCYCLOPEDIA CONTAINS USEFUL APPENDICES INCLUDING: AN EXPANDED GLOSSARY OF MAJOR TERMS IN ENGLISH, GERMAN, SPANISH AND RUSSIAN A REVISED LIST OF ABBREVIATIONS AND ACRONYMS AN UPDATED LIST OF COMPUTER SCIENCE AND ENGINEERING RESEARCH JOURNALS A LIST OF ARTICLES FROM PREVIOUS EDITIONS NOT INCLUDED IN

THE 4TH EDITION A NAME INDEX LISTING ALMOST 3500 INDIVIDUALS CITED IN THE TEXT A COMPREHENSIVE GENERAL INDEX WITH 7000 ENTRIES A CHRONOLOGY OF SIGNIFICANT MILESTONES COMPUTER SOCIETY & ACADEMIC COMPUTER SCIENCE DEPARTMENT LISTINGS NUMERICAL TABLES, MATHEMATICAL NOTATION AND UNITS OF MEASURE HIGHLY-REGARDED AS AN ESSENTIAL RESOURCE FOR COMPUTER PROFESSIONALS, ENGINEERS, MATHEMATICIANS, STUDENTS AND SCIENTISTS, THE ENCYCLOPEDIA OF COMPUTER SCIENCE IS A MUST-HAVE REFERENCE FOR EVERY COLLEGE, UNIVERSITY, BUSINESS AND HIGH-SCHOOL LIBRARY.

AUTONOMY ORIENTED COMPUTING - JIMING LIU
2006-07-02

AUTONOMY ORIENTED COMPUTING IS A COMPREHENSIVE REFERENCE FOR SCIENTISTS, ENGINEERS, AND OTHER PROFESSIONALS CONCERNED WITH THIS PROMISING DEVELOPMENT IN COMPUTER SCIENCE. IT CAN ALSO BE USED AS A TEXT IN GRADUATE/UNDERGRADUATE PROGRAMS IN A BROAD RANGE OF COMPUTER-RELATED DISCIPLINES, INCLUDING ROBOTICS AND AUTOMATION, AMORPHOUS COMPUTING, IMAGE PROCESSING, PROGRAMMING PARADIGMS, COMPUTATIONAL BIOLOGY, ETC. PART ONE DESCRIBES THE BASIC CONCEPTS AND CHARACTERISTICS OF AN AOC SYSTEM AND ENUMERATES THE CRITICAL DESIGN AND ENGINEERING ISSUES FACED IN AOC SYSTEM DEVELOPMENT. PART TWO GIVES DETAILED ANALYSES OF METHODOLOGIES AND CASE

STUDIES TO EVALUATE AOC USED IN PROBLEM SOLVING AND COMPLEX SYSTEM MODELING. THE FINAL CHAPTER OUTLINES POSSIBILITIES FOR FUTURE RESEARCH AND DEVELOPMENT. NUMEROUS ILLUSTRATIVE EXAMPLES, EXPERIMENTAL CASE STUDIES, AND EXERCISES AT THE END OF EACH CHAPTER OF AUTONOMY ORIENTED COMPUTING HELP PARTICULARIZE AND CONSOLIDATE THE METHODOLOGIES AND THEORIES PRESENTED. *ROBOT MANIPULATOR CONTROL* - FRANK L. LEWIS
2003-12-12

ROBOT MANIPULATOR CONTROL OFFERS A COMPLETE SURVEY OF CONTROL SYSTEMS FOR SERIAL-LINK ROBOT ARMS AND ACKNOWLEDGES HOW ROBOTIC DEVICE PERFORMANCE HINGES UPON A WELL-DEVELOPED CONTROL SYSTEM. CONTAINING OVER 750 ESSENTIAL EQUATIONS, THIS THOROUGHLY UP-TO-DATE SECOND EDITION, THE BOOK EXPLICATES THEORETICAL AND MATHEMATICAL REQUISITES FOR CONTROLS DESIGN AND SUMMARIZES CURRENT TECHNIQUES IN COMPUTER SIMULATION AND IMPLEMENTATION OF CONTROLLERS. IT ALSO ADDRESSES PROCEDURES AND ISSUES IN COMPUTED-TORQUE, ROBUST, ADAPTIVE, NEURAL NETWORK, AND FORCE CONTROL. NEW CHAPTERS RELAY PRACTICAL INFORMATION ON COMMERCIAL ROBOT MANIPULATORS AND DEVICES AND CUTTING-EDGE METHODS IN NEURAL NETWORK CONTROL. *LEARNING THROUGH CITIZEN SCIENCE* - NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE 2019-01-28

IN THE LAST TWENTY YEARS, CITIZEN SCIENCE HAS BLOSSOMED AS A WAY TO ENGAGE A BROAD RANGE OF INDIVIDUALS IN DOING SCIENCE. CITIZEN SCIENCE PROJECTS FOCUS ON, BUT ARE NOT LIMITED TO, NONSCIENTISTS PARTICIPATING IN THE PROCESSES OF SCIENTIFIC RESEARCH, WITH THE INTENDED GOAL OF ADVANCING AND USING SCIENTIFIC KNOWLEDGE. A RICH RANGE OF PROJECTS EXTEND THIS FOCUS IN MYRIAD DIRECTIONS, AND THE BOUNDARIES OF CITIZEN SCIENCE AS A FIELD ARE NOT CLEARLY DELINEATED. CITIZEN SCIENCE INVOLVES A GROWING COMMUNITY OF PROFESSIONAL PRACTITIONERS, PARTICIPANTS, AND STAKEHOLDERS, AND A THRIVING COLLECTION OF PROJECTS. WHILE CITIZEN SCIENCE IS OFTEN RECOGNIZED FOR ITS POTENTIAL TO ENGAGE THE PUBLIC IN SCIENCE, IT IS ALSO UNIQUELY POSITIONED TO SUPPORT AND EXTEND PARTICIPANTS' LEARNING IN SCIENCE. CONTEMPORARY UNDERSTANDINGS OF SCIENCE LEARNING CONTINUE TO ADVANCE. INDEED, MODERN THEORIES OF LEARNING RECOGNIZE THAT SCIENCE LEARNING IS COMPLEX AND MULTIFACETED. LEARNING IS AFFECTED BY FACTORS THAT ARE INDIVIDUAL, SOCIAL, CULTURAL, AND INSTITUTIONAL, AND LEARNING OCCURS IN VIRTUALLY ANY CONTEXT AND AT EVERY AGE. CURRENT UNDERSTANDINGS OF SCIENCE LEARNING ALSO SUGGEST THAT SCIENCE LEARNING EXTENDS WELL BEYOND CONTENT KNOWLEDGE IN A DOMAIN TO INCLUDE UNDERSTANDING OF THE NATURE AND METHODS OF SCIENCE.

LEARNING THROUGH CITIZEN SCIENCE: ENHANCING OPPORTUNITIES BY DESIGN DISCUSSES THE POTENTIAL OF CITIZEN SCIENCE TO SUPPORT SCIENCE LEARNING AND IDENTIFIES PROMISING PRACTICES AND PROGRAMS THAT EXEMPLIFY THE PROMISING PRACTICES. THIS REPORT ALSO LAYS OUT A RESEARCH AGENDA THAT CAN FILL GAPS IN THE CURRENT UNDERSTANDING OF HOW CITIZEN SCIENCE CAN SUPPORT SCIENCE LEARNING AND ENHANCE SCIENCE EDUCATION.

END-USER COMPUTING: CONCEPTS, METHODOLOGIES, TOOLS, AND APPLICATIONS - CLARKE, STEVE
2008-02-28

COVERS THE IMPORTANT CONCEPTS, METHODOLOGIES, TECHNOLOGIES, APPLICATIONS, SOCIAL ISSUES, AND EMERGING TRENDS IN THIS FIELD. PROVIDES RESEARCHERS, MANAGERS, AND OTHER PROFESSIONALS WITH THE KNOWLEDGE AND TOOLS THEY NEED TO PROPERLY UNDERSTAND THE ROLE OF END-USER COMPUTING IN THE MODERN ORGANIZATION.

ESSENTIALS OF SOFTWARE ENGINEERING - FRANK TSUI 2011
COMPUTER ARCHITECTURE/SOFTWARE ENGINEERING
WOUND CARE ESSENTIALS - SHARON BARANOSKI
2015-07-29

WRITTEN BY RENOWNED WOUND CARE EXPERTS SHARON BARANOSKI AND ELIZABETH AYELLO, IN COLLABORATION WITH AN INTERDISCIPLINARY TEAM OF EXPERTS, THIS HANDBOOK COVERS ALL ASPECTS OF WOUND ASSESSMENT, TREATMENT, AND CARE.

MICROWAVE CIRCUIT DESIGN USING LINEAR AND NONLINEAR TECHNIQUES - GEORGE D. VENDELIN 2005-10-03

THE ULTIMATE HANDBOOK ON MICROWAVE CIRCUIT DESIGN WITH CAD. FULL OF TIPS AND INSIGHTS FROM SEASONED INDUSTRY VETERANS, MICROWAVE CIRCUIT DESIGN OFFERS PRACTICAL, PROVEN ADVICE ON IMPROVING THE DESIGN QUALITY OF MICROWAVE PASSIVE AND ACTIVE CIRCUITS- WHILE CUTTING COSTS AND TIME. COVERING ALL LEVELS OF MICROWAVE CIRCUIT DESIGN FROM THE ELEMENTARY TO THE VERY ADVANCED, THE BOOK SYSTEMATICALLY PRESENTS COMPUTER-AIDED METHODS FOR LINEAR AND NONLINEAR DESIGNS USED IN THE DESIGN AND MANUFACTURE OF MICROWAVE AMPLIFIERS, OSCILLATORS, AND MIXERS. USING THE NEWEST CAD TOOLS, THE BOOK SHOWS HOW TO DESIGN TRANSISTOR AND DIODE CIRCUITS, AND ALSO DETAILS CAD'S USEFULNESS IN MICROWAVE INTEGRATED CIRCUIT (MIC) AND MONOLITHIC MICROWAVE INTEGRATED CIRCUIT (MMIC) TECHNOLOGY. APPLICATIONS OF NONLINEAR SPICE PROGRAMS, NOW AVAILABLE FOR MICROWAVE CAD, ARE DESCRIBED. STATE-OF-THE-ART COVERAGE INCLUDES MICROWAVE TRANSISTORS (HEMTs, MODFETs, MESFETs, HBTs, AND MORE), HIGH-POWER AMPLIFIER DESIGN, OSCILLATOR DESIGN INCLUDING FEEDBACK TOPOLOGIES, PHASE NOISE AND EXAMPLES, AND MORE. THE TECHNIQUES PRESENTED ARE ILLUSTRATED WITH SEVERAL MMIC DESIGNS, INCLUDING A WIDEBAND AMPLIFIER, A LOW-NOISE AMPLIFIER, AND AN MMIC

MIXER. THIS UNIQUE, ONE-STOP HANDBOOK ALSO FEATURES A MAJOR CASE STUDY OF AN ACTUAL ANTICOLLISION RADAR TRANSCIVER, WHICH IS COMPARED IN DETAIL AGAINST CAD PREDICTIONS; EXAMPLES OF ACTUAL CIRCUIT DESIGNS WITH PHOTOGRAPHS OF COMPLETED CIRCUITS; AND TABLES OF DESIGN FORMULAE.

BALANCING AGILE AND DISCIPLINED ENGINEERING AND MANAGEMENT APPROACHES FOR IT SERVICES AND SOFTWARE PRODUCTS - MORA, MANUEL 2020-07-10

THE HIGHLY DYNAMIC WORLD OF INFORMATION TECHNOLOGY SERVICE MANAGEMENT STRESSES THE BENEFITS OF THE QUICK AND CORRECT IMPLEMENTATION OF IT SERVICES. A DISCIPLINED APPROACH RELIES ON A SEPARATE SET OF ASSUMPTIONS AND PRINCIPLES AS AN AGILE APPROACH, BOTH OF WHICH HAVE COMPLICATED IMPLEMENTATION PROCESSES AS WELL AS COPIOUS BENEFITS. COMBINING THESE TWO APPROACHES TO ENHANCE THE EFFECTIVENESS OF EACH, WHILE DIFFICULT, CAN YIELD EXCEPTIONAL DIVIDENDS. BALANCING AGILE AND DISCIPLINED ENGINEERING AND MANAGEMENT APPROACHES FOR IT SERVICES AND SOFTWARE PRODUCTS IS AN ESSENTIAL PUBLICATION THAT FOCUSES ON CLARIFYING THEORETICAL FOUNDATIONS OF BALANCED DESIGN METHODS WITH CONCEPTUAL FRAMEWORKS AND EMPIRICAL CASES. HIGHLIGHTING A BROAD RANGE OF TOPICS INCLUDING BUSINESS TRENDS, IT SERVICE, AND SOFTWARE DEVELOPMENT, THIS BOOK IS IDEALLY DESIGNED FOR SOFTWARE ENGINEERS,

SOFTWARE DEVELOPERS, PROGRAMMERS, INFORMATION TECHNOLOGY PROFESSIONALS, RESEARCHERS, ACADEMICIANS, AND STUDENTS.

THE INCREMENTAL COMMITMENT SPIRAL MODEL - BARRY W. BOEHM 2014

MANY SYSTEMS DEVELOPMENT PRACTITIONERS FIND TRADITIONAL "ONE-SIZE-FITS-ALL" PROCESSES INADEQUATE FOR THE GROWING COMPLEXITY, DIVERSITY, DYNAMISM, AND ASSURANCE NEEDS OF THEIR PRODUCTS AND SERVICES. THE INCREMENTAL COMMITMENT SPIRAL MODEL (ICSM) RESPONDS WITH A PRINCIPLE- AND RISK-BASED FRAMEWORK FOR DEFINING AND EVOLVING YOUR PROJECT AND CORPORATE PROCESS ASSETS. THIS BOOK EXPLAINS ICSM'S FRAMEWORK OF DECISION CRITERIA AND PRINCIPLES, AND SHOWS HOW TO APPLY THEM THROUGH RELEVANT EXAMPLES.

HANDBOOK OF IMAGE AND VIDEO PROCESSING - ALAN C. BOVIK 2010-07-21

55% NEW MATERIAL IN THE LATEST EDITION OF THIS "MUST-HAVE FOR STUDENTS AND PRACTITIONERS OF IMAGE & VIDEO PROCESSING! THIS HANDBOOK IS INTENDED TO SERVE AS THE BASIC REFERENCE POINT ON IMAGE AND VIDEO PROCESSING, IN THE FIELD, IN THE RESEARCH LABORATORY, AND IN THE CLASSROOM. EACH CHAPTER HAS BEEN WRITTEN BY CAREFULLY SELECTED, DISTINGUISHED EXPERTS SPECIALIZING IN THAT TOPIC AND CAREFULLY REVIEWED BY THE EDITOR, AL BOVIK, ENSURING THAT THE GREATEST DEPTH OF

UNDERSTANDING BE COMMUNICATED TO THE READER.

COVERAGE INCLUDES INTRODUCTORY, INTERMEDIATE AND ADVANCED TOPICS AND AS SUCH, THIS BOOK SERVES EQUALLY WELL AS CLASSROOM TEXTBOOK AS REFERENCE RESOURCE. • PROVIDES PRACTICING ENGINEERS AND STUDENTS WITH A HIGHLY ACCESSIBLE RESOURCE FOR LEARNING AND USING IMAGE/VIDEO PROCESSING THEORY AND ALGORITHMS • INCLUDES A NEW CHAPTER ON IMAGE PROCESSING EDUCATION, WHICH SHOULD PROVE INVALUABLE FOR THOSE DEVELOPING OR MODIFYING THEIR CURRICULA • COVERS THE VARIOUS IMAGE AND VIDEO PROCESSING STANDARDS THAT EXIST AND ARE EMERGING, DRIVING TODAY'S EXPLOSIVE INDUSTRY • OFFERS AN UNDERSTANDING OF WHAT IMAGES ARE, HOW THEY ARE MODELED, AND GIVES AN INTRODUCTION TO HOW THEY ARE PERCEIVED • INTRODUCES THE NECESSARY, PRACTICAL BACKGROUND TO ALLOW ENGINEERING STUDENTS TO ACQUIRE AND PROCESS THEIR OWN DIGITAL IMAGE OR VIDEO DATA • CULMINATES WITH A DIVERSE SET OF APPLICATIONS CHAPTERS, COVERED IN SUFFICIENT DEPTH TO SERVE AS EXTENSIBLE MODELS TO THE READER'S OWN POTENTIAL APPLICATIONS ABOUT THE EDITOR... AL BOVIK IS THE CULLEN TRUST FOR HIGHER EDUCATION ENDOWED PROFESSOR AT THE UNIVERSITY OF TEXAS AT AUSTIN, WHERE HE IS THE DIRECTOR OF THE LABORATORY FOR IMAGE AND VIDEO ENGINEERING (LIVE). HE HAS PUBLISHED OVER 400 TECHNICAL ARTICLES IN THE GENERAL AREA OF IMAGE

AND VIDEO PROCESSING AND HOLDS TWO U.S. PATENTS. DR. BOVIK WAS DISTINGUISHED LECTURER OF THE IEEE SIGNAL PROCESSING SOCIETY (2000), RECEIVED THE IEEE SIGNAL PROCESSING SOCIETY MERITORIOUS SERVICE AWARD (1998), THE IEEE THIRD MILLENNIUM MEDAL (2000), AND TWICE WAS A TWO-TIME HONORABLE MENTION WINNER OF THE INTERNATIONAL PATTERN RECOGNITION SOCIETY AWARD. HE IS A FELLOW OF THE IEEE, WAS EDITOR-IN-CHIEF, OF THE IEEE TRANSACTIONS ON IMAGE PROCESSING (1996-2002), HAS SERVED ON AND CONTINUES TO SERVE ON MANY OTHER PROFESSIONAL BOARDS AND PANELS, AND WAS THE FOUNDING GENERAL CHAIRMAN OF THE IEEE INTERNATIONAL CONFERENCE ON IMAGE PROCESSING WHICH WAS HELD IN AUSTIN, TEXAS IN 1994. * NO OTHER RESOURCE FOR IMAGE AND VIDEO PROCESSING CONTAINS THE SAME BREADTH OF UP-TO-DATE COVERAGE * EACH CHAPTER WRITTEN BY ONE OR SEVERAL OF THE TOP EXPERTS WORKING IN THAT AREA * INCLUDES ALL ESSENTIAL MATHEMATICS, TECHNIQUES, AND ALGORITHMS FOR EVERY TYPE OF IMAGE AND VIDEO PROCESSING USED BY ELECTRICAL ENGINEERS, COMPUTER SCIENTISTS, INTERNET DEVELOPERS, BIOENGINEERS, AND SCIENTISTS IN VARIOUS, IMAGE-INTENSIVE DISCIPLINES

THE COMPUTER ENGINEERING HANDBOOK - VOJIN G. OKLOBDZIJA 2001-12-26

THERE IS ARGUABLY NO FIELD IN GREATER NEED OF A COMPREHENSIVE HANDBOOK THAN COMPUTER ENGINEERING. THE

UNPARALLELED RATE OF TECHNOLOGICAL ADVANCEMENT, THE EXPLOSION OF COMPUTER APPLICATIONS, AND THE NOW-IN-PROGRESS MIGRATION TO A WIRELESS WORLD HAVE MADE IT DIFFICULT FOR ENGINEERS TO KEEP UP WITH ALL THE DEVELOPMENTS IN SPECIALTIES OUTSIDE THEIR OWN

GLOBAL INFECTIOUS DISEASE SURVEILLANCE AND DETECTION - INSTITUTE OF MEDICINE 2007-11-11

EARLY DETECTION IS ESSENTIAL TO THE CONTROL OF EMERGING, REEMERGING, AND NOVEL INFECTIOUS DISEASES, WHETHER NATURALLY OCCURRING OR INTENTIONALLY INTRODUCED. CONTAINING THE SPREAD OF SUCH DISEASES IN A PROFOUNDLY INTERCONNECTED WORLD REQUIRES ACTIVE VIGILANCE FOR SIGNS OF AN OUTBREAK, RAPID RECOGNITION OF ITS PRESENCE, AND DIAGNOSIS OF ITS MICROBIAL CAUSE, IN ADDITION TO STRATEGIES AND RESOURCES FOR AN APPROPRIATE AND EFFICIENT RESPONSE. ALTHOUGH THESE ACTIONS ARE OFTEN VIEWED IN TERMS OF HUMAN PUBLIC HEALTH, THEY ALSO CHALLENGE THE PLANT AND ANIMAL HEALTH COMMUNITIES. SURVEILLANCE, DEFINED AS "THE CONTINUAL SCRUTINY OF ALL ASPECTS OF OCCURRENCE AND SPREAD OF A DISEASE THAT ARE PERTINENT TO EFFECTIVE CONTROL", INVOLVES THE "SYSTEMATIC COLLECTION, ANALYSIS, INTERPRETATION, AND DISSEMINATION OF HEALTH DATA." DISEASE DETECTION AND DIAGNOSIS IS THE ACT OF DISCOVERING A NOVEL, EMERGING, OR REEMERGING DISEASE OR DISEASE EVENT AND IDENTIFYING ITS CAUSE. DIAGNOSIS IS

"THE CORNERSTONE OF EFFECTIVE DISEASE CONTROL AND PREVENTION EFFORTS, INCLUDING SURVEILLANCE." DISEASE SURVEILLANCE AND DETECTION RELIES HEAVILY ON THE ASTUTE INDIVIDUAL: THE CLINICIAN, VETERINARIAN, PLANT PATHOLOGIST, FARMER, LIVESTOCK MANAGER, OR AGRICULTURAL EXTENSION AGENT WHO NOTICES SOMETHING UNUSUAL, ATYPICAL, OR SUSPICIOUS AND BRINGS THIS DISCOVERY IN A TIMELY WAY TO THE ATTENTION OF AN

APPROPRIATE REPRESENTATIVE OF HUMAN PUBLIC HEALTH, VETERINARY MEDICINE, OR AGRICULTURE. MOST DEVELOPED COUNTRIES HAVE THE ABILITY TO DETECT AND DIAGNOSE HUMAN, ANIMAL, AND PLANT DISEASES. GLOBAL INFECTIOUS DISEASE SURVEILLANCE AND DETECTION: ASSESSING THE CHALLENGES-FINDING SOLUTIONS, WORKSHOP SUMMARY IS PART OF A 10 BOOK SERIES AND SUMMARIZES THE RECOMMENDATIONS AND PRESENTATIONS OF THE WORKSHOP.