Free download Matlab sentiment analysis .pdf

Text Mining with MATLAB® Exploratory Data Analysis with MATLAB Digital Spectral Analysis MATLAB® Software User Guide Applied Biomedical Engineering Using Artificial Intelligence and Cognitive Models Machine and Deep Learning Using MATLAB TEXT PROCESSING AND SENTIMENT ANALYSIS USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI Research Anthology on Implementing Sentiment Analysis Across Multiple Disciplines Numerical Analysis Using MATLAB and Spreadsheets Numerical Analysis Using MATLAB and Excel Data Analytics in Spectroscopy Numerical and Analytical Methods with MATLAB Environmental Data Analysis with MatLab Mastering Tableau 2019.1 MATLAB Tools for Control System Analysis and Design Circuit Analysis I MATLAB for Psychologists Circuit Analysis II Hedge Fund Modelling and Analysis using MATLAB Fuzzy Techniques for Decision Making 2018 Computational Partial Differential Equations Using MATLAB® Practical Biomedical Signal Analysis Using MATLAB® Computational Business Analytics Python Data Analysis The Finite Element Method Using MATLAB MATLAB® Recipes for Earth Sciences Radar Systems Analysis and Design Using MATLAB Exploratory Data Analysis with MATLAB Basics of MATLAB and Beyond SIX BOOKS IN ONE: Classification, Prediction, and Sentiment Analysis Using Machine Learning and Deep Learning with Python GUI 5 FIVE DATA SCIENCE PROJECTS FOR ANALYSIS, CLASSIFICATION, PREDICTION, AND SENTIMENT ANALYSIS WITH PYTHON GUI THREE PROJECTS: Sentiment Analysis and Prediction Using Machine Learning and Deep Learning with Python GUI Applied Numerical Analysis with MATLAB®/Simulink® Control System Analysis & Design in MATLAB and SIMULINK HOTEL REVIEW: SENTIMENT ANALYSIS USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI HATE SPEECH DETECTION AND SENTIMENT ANALYSIS USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI Analysing Student Feedback in Higher Education Linear Feedback Control Natural Language Processing for Global and Local Business MATLAB Guide, Third Edition Introduction to MATLAB with Numerical Preliminaries

Text Mining with MATLAB® *2021-10-21*

Text mining with MATLAB provides a comprehensive introduction to text mining using MATLAB It is designed to help text mining practitioners as well as those with little to no experience with text mining in general familiarize themselves with MATLAB and its complex applications The book is structured in three main parts The first part Fundamentals introduces basic procedures and methods for manipulating and operating with text within the MATLAB programming environment The second part of the book Mathematical Models is devoted to motivating introducing and explaining the two main paradigms of mathematical models most commonly used for representing text data the statistical and the geometrical approach eventually The third part of the book Techniques and Applications addresses general problems in text mining and natural language processing applications such as document categorization document search content analysis summarization question answering and conversational systems This second edition includes updates in line with the recently released Text Analytics Toolbox within the MATLAB product and introduces three new chapters and six new sections in existing ones All descriptions presented are supported with practical examples that are fully reproducible Further reading as well as additional exercises and projects are proposed at the end of each chapter for those readers interested in conducting further experimentation

Exploratory Data Analysis with MATLAB 2017-08-07

Praise for the second edition The authors present an intuitive and easy to read book accompanied by many examples proposed exercises good references and comprehensive appendices that initiate the reader unfamiliar with MATLAB Adolfo Alvarez Pinto International Statistical Review Practitioners of EDA who use MATLAB will want a copy of this book The authors have done a great service by bringing together so many EDA routines but their main accomplishment in this dynamic text is providing the understanding and tools to do EDA David A Huckaby MAA Reviews Exploratory Data Analysis EDA is an important part of the data analysis process The methods presented in this text are ones that should be in the toolkit of every data scientist As computational sophistication has increased and data sets have grown in size and complexity EDA has become an even more important process for visualizing and summarizing data before making assumptions to generate hypotheses and models Exploratory Data Analysis with MATLAB Third Edition presents EDA methods from a computational perspective and uses numerous examples and applications to show how the methods are used in practice The authors use MATLAB code pseudo code and algorithm descriptions to illustrate the concepts The MATLAB code for examples data sets and the EDA Toolbox are available for download on the book s website New to the Third Edition Random projections and estimating local intrinsic dimensionality Deep learning autoencoders and stochastic neighbor embedding Minimum spanning tree and additional cluster validity indices Kernel density estimation plots for visualizing data distributions such as beanplots and violin plots A chapter on visualizing categorical data

Digital Spectral Analysis MATLAB® Software User Guide *2019-06-12*

This user guide serves as a companion to Digital Spectral Analysis Second Edition Dover Publications 2019 illustrating all the text s techniques and algorithms plus time versus frequency analysis The spectral demonstrations use MATLAB software that encompasses the full experience from inputting signal sources interactively setting technique parameters and processing with those parameters and choosing from a variety of plotting techniques to display the results The processing functions and scripts have been coded to automatically handle sample data that is either real valued or complex valued permitting the user to simply modify the demonstration scripts to input their own data for analysis Four integrated software categories support the demonstrations These are the main MATLAB spectral demonstration scripts supporting MATLAB plotting scripts MATLAB processing functions listed in this guide and signal sample data sources scripts and demonstration data files can be found on the Dover website for free downloading See the Introduction for details

Applied Biomedical Engineering Using Artificial Intelligence and Cognitive Models 2021-11-30

Applied Biomedical Engineering Using Artificial Intelligence and Cognitive Models focuses on the relationship between three different multidisciplinary branches of engineering biomedical engineering cognitive science and computer science through artificial intelligence models These models will be used to study how the nervous system and musculoskeletal system obey movement orders from the brain as well as the mental processes of the information during cognition when injuries and neurologic diseases are present in the human body The interaction between these three areas are studied in this book with the objective of obtaining AI models on injuries and neurologic diseases of the human body Studying diseases of the brain spine and the nerves that connect them with the musculoskeletal system there are more than 600 diseases of the nervous system including brain tumors epilepsy Parkinson s disease stroke and many others These diseases affect the human cognitive system that sends orders from the central nervous system CNS through the peripheral nervous systems PNS to do tasks using the musculoskeletal system These actions can be detected by many bioinstruments biomedical instruments and cognitive device data allowing us to apply AI using machine learning deep learning cognitive computing models through algorithms to analyze detect classify and forecast the process of various illnesses diseases and injuries of the human body Applied Biomedical Engineering Using Artificial Intelligence and Cognitive Models provides readers with the study of injuries illness and neurological diseases of the human body through artificial intelligence using machine learning ML deep learning DL and cognitive computing CC models based on algorithms developed with MATLAB and IBM Watson provides an introduction to cognitive science cognitive computing and human cognitive relation to help in the solution of AI biomedical engineering problems Explain different artificial intelligence AI including evolutionary algorithms to emulate natural evolution reinforced learning artificial neural network ANN type and cognitive learning and to obtain many AI models for biomedical engineering problems Includes coverage of the evolution artificial intelligence through machine learning ML deep learning DL cognitive computing CC using MATLAB as a programming language with many add on MATLAB toolboxes and AI based commercial products cloud services as IBM cognitive computing IBM Watson IBM Watson Studio IBM Watson Studio Visual Recognition and others Provides the necessary tools to accelerate obtaining results for the analysis of injuries illness and neurologic diseases that can be detected through the static kinetics and kinematics and natural body language data and medical imaging techniques applying AI using ML DL CC algorithms with the objective of obtaining appropriate conclusions to create solutions that improve the quality of life of patients

Machine and Deep Learning Using MATLAB *2023-10-12*

machine and deep learning in depth resource covering machine and deep learning methods using matlab tools and algorithms providing insights and algorithmic decision making processes machine and deep learning using matlab introduces early career professionals to the power of matlab to explore machine and deep learning applications by explaining the relevant matlab tool or app and how it is used for a given method or a collection of methods its properties in terms of input and output arguments are explained the limitations or applicability is indicated via an accompanied text or a table and a complete running example is shown with all needed matlab command prompt code the text also presents the results in the form of figures or tables in parallel with the given matlab code and the matlab written code can be later used as a template for trying to solve new cases or datasets throughout the text features worked examples in each chapter for self study with an accompanying website providing solutions and coding samples highlighted notes draw the attention of the user to critical points or issues readers will also find information on numeric data acquisition and analysis in the form of applying computational algorithms to predict the numeric data patterns clustering or unsupervised learning relationships between predictors and response variable supervised categorically sub divided into classification discrete response and regression continuous response image acquisition and analysis in the form of applying one of neural networks and estimating net accuracy net loss and or rmse for the successive training validation and testing steps retraining and creation for image labeling object identification regression classification and text recognition machine and deep learning using matlab is a useful and highly comprehensive resource on the subject for professionals advanced students and researchers who have some familiarity with matlab and are situated in engineering and scientific fields who wish to gain mastery over the software and its numerous applications

Text Processing and Sentiment Analysis Using Machine Learning and Deep Learning with Python GUI 2023-06-26

in this book we explored a code implementation for sentiment analysis using machine learning models including xgboost lightgbm and lstm the code aimed to build train and evaluate these models on twitter data to classify sentiments throughout the project we gained insights into the key steps involved and observed the findings and functionalities of the code sentiment analysis is a vital task in natural language processing and the code was to give a comprehensive approach to tackle it the implementation began by checking if pre trained models for xgboost and lightgbm existed if available the models were loaded otherwise new models were built and trained this approach allowed for reusability of trained models saving time and effort in subsequent runs similarly the code checked if preprocessed data for lstm existed if not it performed tokenization and padding on the text data splitting it into train test and validation sets the preprocessed data was saved for future use the code also provided a function to build and train the lstm model it defined the model architecture using the keras sequential api incorporating layers like embedding convolutional max pooling bidirectional lstm dropout and dense output the model was compiled with appropriate loss and optimization functions training was carried out with early stopping implemented to prevent overfitting after training the model summary was printed and both the model and training history were saved for future reference the train lstm function ensured that the lstm model was ready for prediction by checking the existence of preprocessed data and trained models if necessary it performed the required preprocessing and model building steps the pred lstm function was responsible for loading the lstm model and generating predictions for the test data the function returned the predicted sentiment labels allowing for further analysis and evaluation to facilitate user interaction the code included a functionality to choose the lstm model for prediction the choose prediction lstm function was triggered when the user selected the lstm option from a dropdown menu it called the pred lstm function performed evaluation tasks and visualized the results confusion matrices and true vs predicted value plots were generated to assess the model s performance additionally the loss and accuracy history from training were plotted providing insights into the model s learning process in conclusion this project provided a comprehensive overview of sentiment analysis using machine learning models the code implementation showcased the steps involved in building training and evaluating models like xgboost lightgbm and lstm it emphasized the importance of data preprocessing model building and evaluation in sentiment analysis tasks the code also demonstrated functionalities for reusing pre trained models and saving preprocessed data enhancing efficiency and ease of use through visualization techniques such as confusion matrices and accuracy loss curves the code enabled a better understanding of the model s performance and learning dynamics overall this project highlighted the practical aspects of sentiment analysis and illustrated how different machine learning models can be employed to tackle this task effectively

Research Anthology on Implementing Sentiment Analysis Across Multiple Disciplines *2022-06-10*

the rise of internet and social media usage in the past couple of decades has presented a very useful tool for many different industries and fields to utilize with much of the world s population writing their opinions on various products and services in public online forums industries can collect this data through various computational tools and methods these tools and methods however are still being perfected in both collection and implementation sentiment analysis can be used for many different industries and for many different purposes which could better business performance and even society the research anthology on implementing sentiment analysis across multiple disciplines discusses the tools methodologies applications and implementation of sentiment analysis across various disciplines and industries such as the pharmaceutical industry government and the tourism industry it further presents emerging technologies and developments within the field of sentiment analysis and opinion mining covering topics such as electronic word of mouth ewom public security and user similarity this major reference work is a comprehensive resource for computer scientists it professionals ai scientists business leaders and managers marketers advertising agencies public administrators government officials university administrators libraries students and faculty of higher education researchers and academicians

Numerical Analysis Using MATLAB and Spreadsheets *2004*

annotation this text provides complete clear and detailed explanations of the principal numerical analysis methods and well known functions used in science and engineering these are illustrated with many practical examples with this text the reader learns numerical analysis with many real world applications matlab and spreadsheets simultaneously this text includes the following chapters introduction to matlab root approximations sinusoids and complex numbers matrices and determinants review of differential equations fourier taylor and maclaurin series finite differences and interpolation linear and parabolic regression solution of differential equations

BY NUMERICAL METHODS INTEGRATION BY NUMERICAL METHODS DIFFERENCE EQUATIONS PARTIAL FRACTION EXPANSION THE GAMMA AND BETA FUNCTIONS ORTHOGONAL FUNCTIONS AND MATRIX FACTORIZATIONS BESSEL LEGENDRE AND CHEBYSHEV POLYNOMIALS OPTIMIZATION METHODSEACH CHAPTER CONTAINS NUMEROUS PRACTICAL APPLICATIONS SUPPLEMENTED WITH DETAILED INSTRUCTIONSFOR USING MATLAB AND OR MICROSOFT EXCEL TO OBTAIN QUICK SOLUTIONS

Numerical Analysis Using MATLAB and Excel 2007

THIS TEXT IS WRITTEN PRIMARILY FOR STUDENTS READERS WHO HAVE A GOOD BACKGROUND OF HIGH SCHOOL ALGEBRA GEOMETRY TRIGONOMETRY AND THE FUNDAMENTALS OF DIFFERENTIAL AND INTEGRAL CALCULUS

Data Analytics in Spectroscopy 2024-02-06

THIS TEXTBOOK SUMMARIZES VARIOUS STUDIES AND SIGNIFICANT MATERIALS ON DATA ANALYTICS IN SPECTROSCOPY ITS RIGOROUS MATHEMATICAL BASIS IN DEPTH DESCRIPTION AND NUMEROUS EXAMPLES OF APPLICATIONS IN CHEMISTRY AND PHYSICS MAKE THIS BOOK VALUABLE FOR THEORISTS PRACTITIONERS AND STUDENTS SPECIALIZING IN DATA PROCESSING IN SPECTROSCOPY CHEMOMETRICS AND ANALYTICAL CHEMISTRY THE BIBLIOGRAPHY BRIEFLY DESCRIBES HUNDREDS OF DATA ANALYTICS APPLICATIONS FOR SOLVING SPECTROSCOPIC TASKS IN INDUSTRIAL AND RESEARCH LABORATORIES THIS BOOK DIFFERS FROM EXISTING BRIEF REVIEWS AND ARTICLES ON THIS TOPIC IN THAT IT FORMS FOR THE FIRST TIME THE BIG PICTURE OF ALL KINDS OF DATA ANALYTICS METHODS IN SPECTROSCOPY THE BOOK ALSO PROVIDES QUICKLY REPRODUCIBLE COMPUTER CALCULATIONS TO ILLUSTRATE ITS SIGNIFICANT THEORETICAL STATEMENTS AS SUCH IT CAN ALSO SERVE AS A PRACTICAL GUIDE TO LECTURERS IN DATA ANALYTICS IN THE BROAD FIELD OF SPECTROSCOPY INCLUDING CHEMOMETRICS AND ANALYTICAL CHEMISTRY

Numerical and Analytical Methods with MATLAB 2009-08-11

NUMERICAL AND ANALYTICAL METHODS WITH MATLAB PRESENTS EXTENSIVE COVERAGE OF THE MATLAB PROGRAMMING LANGUAGE FOR ENGINEERS IT DEMONSTRATES HOW THE BUILT IN FUNCTIONS OF MATLAB CAN BE USED TO SOLVE SYSTEMS OF LINEAR EQUATIONS ODES ROOTS OF TRANSCENDENTAL EQUATIONS STATISTICAL PROBLEMS OPTIMIZATION PROBLEMS CONTROL SYSTEMS PROBLEMS AND STRESS ANALYSIS PROBLEMS THESE BUILT IN FUNCTIONS ARE ESSENTIALLY BLACK BOXES TO STUDENTS BY COMBINING MATLAB WITH BASIC NUMERICAL AND ANALYTICAL TECHNIQUES THE MYSTERY OF WHAT THESE BLACK BOXES MIGHT CONTAIN IS SOMEWHAT ALLEVIATED THIS CLASSROOM TESTED TEXT FIRST REVIEWS THE ESSENTIALS INVOLVED IN WRITING COMPUTER PROGRAMS AS WELL AS FUNDAMENTAL ASPECTS OF MATLAB IT NEXT EXPLAINS HOW MATRICES CAN SOLVE PROBLEMS OF LINEAR EQUATIONS HOW TO OBTAIN THE ROOTS OF ALGEBRAIC AND TRANSCENDENTAL EQUATIONS HOW TO EVALUATE INTEGRALS AND HOW TO SOLVE VARIOUS ODES AFTER EXPLORING THE FEATURES OF SIMULINK THE BOOK DISCUSSES CURVE FITTING OPTIMIZATION PROBLEMS AND PDE PROBLEMS SUCH AS THE VIBRATING STRING UNSTEADY HEAT CONDUCTION AND SOUND WAVES THE FOCUS THEN SHIFTS TO THE SOLUTION OF ENGINEERING PROBLEMS VIA ITERATION PROCEDURES DIFFERENTIAL EQUATIONS VIA LAPLACE TRANSFORMS AND STRESS ANALYSIS PROBLEMS VIA THE FINITE ELEMENT METHOD THE FINAL CHAPTER EXAMINES CONTROL SYSTEMS THEORY INCLUDING THE DESIGN OF SINGLE INPUT SINGLE OUTPUT SISO SYSTEMS TWO COURSES IN ONE TEXTBOOK THE FIRST SIX CHAPTERS ARE APPROPRIATE FOR A LOWER LEVEL COURSE AT THE SOPHOMORE LEVEL THE REMAINING CHAPTERS ARE IDEAL FOR A COURSE AT THE SENIOR UNDERGRADUATE OR FIRST YEAR GRADUATE LEVEL MOST OF THE CHAPTERS CONTAIN PROJECTS THAT REQUIRE STUDENTS TO WRITE A COMPUTER PROGRAM IN MATLAB THAT PRODUCES TABLES GRAPHS OR BOTH MANY SAMPLE MATLAB PROGRAMS SCRIPTS IN THE TEXT PROVIDE GUIDANCE ON COMPLETING THESE PROJECTS

Environmental Data Analysis with MatLab 2009-10-13

ENVIRONMENTAL DATA ANALYSIS WITH MATLAB IS A REFERENCE WORK DESIGNED TO TEACH STUDENTS AND RESEARCHERS THE BASICS OF DATA ANALYSIS IN THE ENVIRONMENTAL SCIENCES USING MATLAB AND MORE SPECIFICALLY HOW TO ANALYZE DATA SETS IN CAREFULLY CHOSEN REALISTIC SCENARIOS ALTHOUGH WRITTEN IN A SELF CONTAINED WAY THE TEXT IS SUPPLEMENTED WITH DATA SETS AND MATLAB SCRIPTS THAT CAN BE USED AS A DATA ANALYSIS TUTORIAL AVAILABLE AT THE AUTHOR S WEBSITE LDEO COLUMBIA EDU USERS MENKE EDAWM INDEX HTM THIS BOOK IS ORGANIZED INTO 12 CHAPTERS AFTER INTRODUCING THE READER TO THE BASICS OF DATA ANALYSIS WITH MATLAB THE DISCUSSION TURNS TO THE POWER OF LINEAR MODELS QUANTIFYING PRECONCEPTIONS DETECTING PERIODICITIES PATTERNS SUGGESTED BY DATA DETECTING CORRELATIONS AMONG THE DATA FILLING IN MISSING DATA AND DETERMINING WHETHER YOUR RESULTS ARE SIGNIFICANT HOMEWORK PROBLEMS HELP USERS FOLLOW UP UPON CASE STUDIES THIS TEXT WILL APPEAL TO ENVIRONMENTAL SCIENTISTS SPECIALISTS RESEARCHERS ANALYSTS AND UNDERGRADUATE AND GRADUATE STUDENTS IN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL BIOLOGY AND EARTH SCIENCE COURSES WHO ARE WORKING TO ANALYZE DATA AND COMMUNICATE RESULTS WELL WRITTEN AND OUTLINES A CLEAR LEARNING PATH FOR RESEARCHERS AND STUDENTS USES REAL WORLD ENVIRONMENTAL EXAMPLES AND CASE STUDIES MATLAB SOFTWARE FOR APPLICATION IN A READILY AVAILABLE SOFTWARE ENVIRONMENT HOMEWORK PROBLEMS HELP USER FOLLOW UP UPON CASE STUDIES WITH HOMEWORK THAT EXPANDS THEM

Mastering Tableau 2019.1 2019-02-28

BUILD DESIGN AND IMPROVE ADVANCED BUSINESS INTELLIGENCE SOLUTIONS USING TABLEAU S LATEST FEATURES INCLUDING TABLEAU PREP TABLEAU HYPER AND TABLEAU SERVER KEY FEATURESMASTER NEW FEATURES IN TABLEAU 2019 1 TO SOLVE REAL WORLD ANALYTICS CHALLENGESPERFORM GEO SPATIAL ANALYTICS TIME SERIES ANALYSIS AND SELF SERVICE ANALYTICS USING REAL LIFE EXAMPLESBUILD AND PUBLISH DASHBOARDS AND EXPLORE STORYTELLING USING PYTHON AND MATLAB INTEGRATION SUPPORTBOOK DESCRIPTION TABLEAU IS ONE OF THE LEADING BUSINESS INTELLIGENCE BI TOOLS USED TO SOLVE BI AND ANALYTICS CHALLENGES WITH THIS BOOK YOU WILL MASTER TABLEAU S FEATURES AND OFFERINGS IN VARIOUS PARADIGMS OF THE BI DOMAIN THIS BOOK IS ALSO THE SECOND EDITION OF THE POPULAR MASTERING TABLEAU SERIES WITH NEW FEATURES EXAMPLES AND UPDATED CODE THE BOOK COVERS ESSENTIAL TABLEAU CONCEPTS AND ITS ADVANCED FUNCTIONALITIES USING TABLEAU HYPER AND TABLEAU PREP YOU LL BE ABLE TO HANDLE AND PREPARE DATA EASILY YOU LL GEAR UP TO PERFORM COMPLEX JOINS SPATIAL JOINS UNION AND DATA BLENDING TASKS USING PRACTICAL EXAMPLES FOLLOWING THIS YOU LL LEARN HOW TO PERFORM DATA DENSIFICATION TO MAKE DISPLAYING GRANULAR DATA EASIER NEXT YOU LL EXPLORE EXPERT LEVEL EXAMPLES TO HELP YOU WITH ADVANCED CALCULATIONS MAPPING AND VISUAL DESIGN USING VARIOUS TABLEAU EXTENSIONS WITH THE HELP OF EXAMPLES YOU LL ALSO LEARN ABOUT IMPROVING DASHBOARD PERFORMANCE CONNECTING TABLEAU SERVER AND UNDERSTANDING DATA VISUALIZATIONS IN THE FINAL CHAPTERS YOU LL COVER ADVANCED USE CASES SUCH AS SELF SERVICE ANALYTICS TIME SERIES ANALYTICS AND GEO SPATIAL ANALYTICS AND LEARN TO CONNECT TABLEAU TO R PYTHON AND MATLAB BY THE END OF THIS BOOK YOU LL HAVE MASTERED THE ADVANCED OFFERINGS OF TABLEAU AND BE ABLE TO TACKLE COMMON AND NOT SO COMMON CHALLENGES FACED IN THE BI DOMAIN WHAT YOU WILL LEARNGET UP TO SPEED WITH VARIOUS TABLEAU COMPONENTSMASTER DATA PREPARATION TECHNIQUES USING TABLEAU PREPDISCOVER HOW TO USE TABLEAU TO CREATE A POWERPOINT LIKE

PRESENTATIONUNDERSTAND DIFFERENT TABLEAU VISUALIZATION TECHNIQUES AND DASHBOARD DESIGNSINTERACT WITH THE TABLEAU SERVER TO UNDERSTAND ITS ARCHITECTURE AND FUNCTIONALITIESSTUDY ADVANCED VISUALIZATIONS AND DASHBOARD CREATION TECHNIQUESBRUSH UP ON POWERFUL SELF SERVICE ANALYTICS TIME SERIES ANALYTICS AND GEO SPATIAL ANALYTICSWHO THIS BOOK IS FOR THIS BOOK IS DESIGNED FOR BUSINESS ANALYSTS BI PROFESSIONALS AND DATA ANALYSTS WHO WANT TO MASTER TABLEAU TO SOLVE A RANGE OF DATA SCIENCE AND BUSINESS INTELLIGENCE PROBLEMS THE BOOK IS IDEAL IF YOU HAVE A GOOD UNDERSTANDING OF TABLEAU AND WANT TO TAKE YOUR SKILLS TO THE NEXT LEVEL

MATLAB Tools for Control System Analysis and Design 1994

THIS BOOK SOFTWARE PACKAGE PROVIDES STUDENTS WITH READY TO USE M FILES FOR THE ANALYSIS AND DESIGN OF LINEAR CONTROL SYSTEMS INTRODUCTORY MATERIAL ON THE THEORY OF FEEDBACK CONTROL IS INTEGRATED WITH PROGRAMS SO THAT STUDENTS CAN OBTAIN AN ON HAND REVIEW THE TEXT PROVDIES SOFTWARE FUNCTIONS THROUGHOUT THAT ARE USER INTERACTIVE AND MENU DRIVEN SO THAT STUDENTS DO NOT NEED TO KNOW MUCH ABOUT MATLAB OR HOW TO PROGRAM IT SOLUTIONS TO PROBLEMS CAN BE FOUND USING THE CSAD TOOLBOX ELIMINATING THE NEED FOR A SOLUTIONS MANUAL

Circuit Analysis I 2009

THIS TEXT IS AN INTRODUCTION TO THE BASIC PRINCIPLES OF ELECTRICAL ENGINEERING AND COVERS DC AND AC CIRCUIT ANALYSIS AND TRANSIENTS IT IS INTENDED FOR ALL ENGINEERING MAJORS AND PRESUMES KNOWLEDGE OF FIRST YEAR DIFFERENTIAL AND INTEGRAL CALCULUS AND PHYSICS THE LAST TWO CHAPTERS INCLUDE STEP BY STEP PROCEDURES FOR THE SOLUTIONS OF SIMPLE DIFFERENTIAL EQUATIONS USED IN THE DERIVATION OF THE NATURAL AND FORCES RESPONSES APPENDICES A B AND C ARE INTRODUCTIONS TO MATLAB SIMULINK AND SIMPOWERSYSTEMS RESPECTIVELY APPENDIX D IS A REVIEW OF COMPLEX NUMBERS AND APPENDIX E IS AN INTRODUCTION TO MATRICES AND DETERMINANTS

MATLAB for Psychologists 2012-03-24

THE MATRIX LABORATORY INTERACTIVE COMPUTING ENVIRONMENT MATLAB HAS BROUGHT CREATIVITY TO RESEARCH IN DIVERSE DISCIPLINES PARTICULARLY IN DESIGNING AND PROGRAMMING EXPERIMENTS MORE COMMONLY USED IN MATHEMATICS AND THE SCIENCES IT ALSO LENDS ITSELF TO A VARIETY OF APPLICATIONS ACROSS THE FIELD OF PSYCHOLOGY FOR THE NOVICE LOOKING TO USE IT IN EXPERIMENTAL PSYCHOLOGY RESEARCH THOUGH BECOMING FAMILIAR WITH MATLAB CAN BE A DAUNTING TASK MATLAB FOR PSYCHOLOGISTS EXPERTLY GUIDES READERS THROUGH THE COMPONENT STEPS SKILLS AND OPERATIONS OF THE SOFTWARE WITH PLENTIFUL GRAPHICS AND EXAMPLES TO MATCH THE READER S COMFORT LEVEL USING AN EXTENDED ILLUSTRATION THIS CONCISE VOLUME EXPLAINS THE PROGRAM S USEFULNESS AT ANY POINT IN AN EXPERIMENT WITHOUT THE LIMITS IMPOSED BY OTHER TYPES OF SOFTWARE AND THE AUTHORS DEMONSTRATE THE RESPONSIVENESS OF MATLAB TO THE INDIVIDUAL S RESEARCH NEEDS WHETHER THE TASK IS PROGRAMMING EXPERIMENTS CREATING SENSORY STIMULI RUNNING SIMULATIONS OR CALCULATING STATISTICS FOR DATA ANALYSIS KEY FEATURES OF THE COVERAGE THINKING IN A MATRIX WAY HANDLING AND PLOTTING DATA GUIDELINES FOR IMPROVED PROGRAMMING SOUND AND IMAGING STATISTICAL ANALYSIS AND SIGNAL DETECTION THEORY INDEXES THE GRAPHICAL USER INTERFACE THE PSYCHOPHYSICS TOOLBOX MATLAB FOR PSYCHOLOGISTS SERVES A WIDE AUDIENCE OF ADVANCED UNDERGRADUATE AND GRADUATE LEVEL PSYCHOLOGY STUDENTS PROFESSORS AND RESEARCHERS AS WELL AS LAB TECHNICIANS INVOLVED IN PROGRAMMING PSYCHOLOGY EXPERIMENTS

Circuit Analysis II 2003

DESIGNED FOR USE IN A SECOND COURSE IN CIRCUIT ANALYSIS THIS TEXT ENGAGES A FULL SPECTRUM OF CIRCUIT ANALYSIS RELATED SUBJECTS RANGING FROM THE MOST ABSTRACT TO THE MOST PRACTICAL FEATURED ARE METHODS OF EXPRESSING SIGNALS IN TERMS OF THE ELEMENTARY FUNCTIONS AN INTRODUCTION TO SECOND ORDER CIRCUITS AND SEVERAL EXAMPLES OF ANALYSING ELECTRIC CIRCUITS USING LAPLACE TRANSFORMATION METHODS THOUGH NOT WRITTEN EXPLICITLY TO BE USED WITH MATLAB THIS TEXT PROVIDES MANY USEFUL TIPS AND STRATEGIES FOR MATLAB ALLOWING STUDENTS TO GET THE MOST OUT OF THE POPULAR PROGRAM ALL OF THE INFORMATION PROVIDED IS DESIGNED TO BE COVERED IN ONE SEMESTER OR TWO QUARTERS

Hedge Fund Modelling and Analysis using MATLAB 2014-03-27

THE SECOND BOOK IN DARBYSHIRE AND HAMPTON S HEDGE FUND MODELLING AND ANALYSIS SERIES HEDGE FUND MODELLING AND ANALYSIS USING MATLAB TAKES ADVANTAGE OF THE HUGE LIBRARY OF BUILT IN FUNCTIONS AND SUITE OF FINANCIAL AND ANALYTIC PACKAGES AVAILABLE TO MATLAB THIS ALLOWS FOR A MORE DETAILED ANALYSIS OF SOME OF THE MORE COMPUTATIONALLY INTENSIVE AND ADVANCED TOPICS SUCH AS HEDGE FUND CLASSIFICATION PERFORMANCE MEASUREMENT AND MEAN VARIANCE OPTIMISATION DARBYSHIRE AND HAMPTON S FIRST BOOK IN THE SERIES HEDGE FUND MODELLING AND ANALYSIS USING EXCEL AND VBA IS SEEN AS A VALUABLE SUPPLEMENTARY TEXT TO THIS BOOK STARTING WITH AN OVERVIEW OF THE HEDGE FUND INDUSTRY THE BOOK THEN LOOKS AT A VARIETY OF COMMERCIALLY AVAILABLE HEDGE FUND DATA SOURCES AFTER COVERING KEY STATISTICAL TECHNIQUES AND METHODS THE BOOK DISCUSSES MEAN VARIANCE OPTIMISATION HEDGE FUND CLASSIFICATION AND PERFORMANCE WITH AN EMPHASIS ON RISK ADJUSTED RETURN METRICS FINALLY COMMON HEDGE FUND MARKET RISK MANAGEMENT TECHNIQUES SUCH AS TRADITIONAL VALUE AT RISK METHODS MODIFIED EXTENSIONS AND EXPECTED SHORTFALL ARE COVERED THE BOOK S DEDICATED WEBSITE DARBYSHIREHAMPTON COM PROVIDES FREE DOWNLOADS OF ALL THE DATA AND MATLAB SOURCE CODE AS WELL AS OTHER USEFUL RESOURCES HEDGE FUND MODELLING AND ANALYSIS USING MATLAB SERVES AS A DEFINITIVE INTRODUCTORY GUIDE TO HEDGE FUND MODELLING AND ANALYSIS AND WILL PROVIDE INVESTORS INDUSTRY PRACTITIONERS AND STUDENTS ALIKE WITH A USEFUL RANGE OF TOOLS AND TECHNIQUES FOR ANALYSING AND ESTIMATING ALPHA AND BETA SOURCES OF RETURN PERFORMING MANAGER RANKING AND MARKET RISK MANAGEMENT

Fuzzy Techniques for Decision Making 2018 2020-12-02

ZADEH S FUZZY SET THEORY INCORPORATES THE IMPRECISENESS OF DATA AND EVALUATIONS BY IMPUTTING THE DEGREES BY WHICH EACH OBJECT BELONGS TO A SET ITS SUCCESS FOSTERED THEORIES THAT CODIFY THE SUBJECTIVITY UNCERTAINTY IMPRECISION OR ROUGHNESS OF THE EVALUATIONS THEIR RATIONALE IS TO PRODUCE NEW FLEXIBLE METHODOLOGIES IN ORDER TO MODEL A VARIETY OF CONCRETE DECISION PROBLEMS MORE REALISTICALLY THIS SPECIAL ISSUE GARNERS CONTRIBUTIONS ADDRESSING NOVEL TOOLS TECHNIQUES AND METHODOLOGIES FOR DECISION MAKING INCLUSIVE OF BOTH INDIVIDUAL AND GROUP SINGLE OR MULTI CRITERIA DECISION MAKING IN THE CONTEXT OF THESE THEORIES IT CONTAINS 38 RESEARCH ARTICLES THAT CONTRIBUTE TO A VARIETY OF SETUPS THAT COMBINE FUZZINESS HESITANCY ROUGHNESS COVERING SETS AND LINGUISTIC APPROACHES THEIR RANGES VARY FROM FUNDAMENTAL OR TECHNICAL TO APPLIED APPROACHES

Computational Partial Differential Equations Using MATLAB® *2019-09-26*

IN THIS POPULAR TEXT FOR AN NUMERICAL ANALYSIS COURSE THE AUTHORS INTRODUCE SEVERAL MAJOR METHODS OF SOLVING VARIOUS PARTIAL DIFFERENTIAL EQUATIONS PDES INCLUDING ELLIPTIC PARABOLIC AND HYPERBOLIC EQUATIONS IT COVERS TRADITIONAL TECHNIQUES INCLUDING THE CLASSIC FINITE DIFFERENCE METHOD FINITE ELEMENT METHOD AND STATE OF THE ART NUMERCIAL METHODS THE TEXT UNIQUELY EMPHASIZES BOTH THEORETICAL NUMERICAL ANALYSIS AND PRACTICAL IMPLEMENTATION OF THE ALGORITHMS IN MATLAB THIS NEW EDITION INCLUDES A NEW CHAPTER FINITE VALUE METHOD THE PRESENTATION HAS BEEN TIGHTENED NEW EXERCISES AND APPLICATIONS ARE INCLUDED AND THE TEXT REFERS NOW TO THE LATEST RELEASE OF MATLAB KEY SELLING POINTS A SUCCESSFUL TEXTBOOK FOR AN UNDERGRADUATE TEXT ON NUMERICAL ANALYSIS OR METHODS TAUGHT IN MATHEMATICS AND COMPUTER ENGINEERING THIS COURSE IS TAUGHT IN EVERY UNIVERSITY THROUGHOUT THE WORLD WITH AN ENGINEERING DEPARTMENT OR SCHOOL COMPETITIVE ADVANTAGE BROADER NUMERICAL METHODS INCLUDING FINITE DIFFERENCE FINITE ELEMENT MESHLESS METHOD AND FINITE VOLUME METHOD PROVIDES THE MATLAB SOURCE CODE FOR MOST POPULAR PDES WITH DETAILED EXPLANATION ABOUT THE IMPLEMENTATION AND THEORETICAL ANALYSIS NO OTHER EXISTING TEXTBOOK IN THE MARKET OFFERS A GOOD COMBINATION OF THEORETICAL DEPTH AND PRACTICAL SOURCE CODES

Practical Biomedical Signal Analysis Using MATLAB® *2011-09-12*

PRACTICAL BIOMEDICAL SIGNAL ANALYSIS USING MATLAB PRESENTS A COHERENT TREATMENT OF VARIOUS SIGNAL PROCESSING METHODS AND APPLICATIONS THE BOOK NOT ONLY COVERS THE CURRENT TECHNIQUES OF BIOMEDICAL SIGNAL PROCESSING BUT IT ALSO OFFERS GUIDANCE ON WHICH METHODS ARE APPROPRIATE FOR A GIVEN TASK AND DIFFERENT TYPES OF DATA THE FIRST SEVERAL CHAPTERS OF THE TEXT DESCRIBE SIGNAL ANALYSIS TECHNIQUES INCLUDING THE NEWEST AND MOST ADVANCED METHODS IN AN EASY AND ACCESSIBLE WAY MATLAB ROUTINES ARE LISTED WHEN AVAILABLE AND FREELY AVAILABLE SOFTWARE IS DISCUSSED WHERE APPROPRIATE THE FINAL CHAPTER EXPLORES THE APPLICATION OF THE METHODS TO A BROAD RANGE OF BIOMEDICAL SIGNALS HIGHLIGHTING PROBLEMS ENCOUNTERED IN PRACTICE A UNIFIED OVERVIEW OF THE FIELD THIS BOOK EXPLAINS HOW TO PROPERLY USE SIGNAL PROCESSING TECHNIQUES FOR BIOMEDICAL APPLICATIONS AND AVOID MISINTERPRETATIONS AND PITFALLS IT HELPS READERS TO CHOOSE THE APPROPRIATE METHOD AS WELL AS DESIGN THEIR OWN METHODS

Computational Business Analytics *2013-12-14*

LEARN HOW TO PROPERLY USE THE LATEST ANALYTICS APPROACHES IN YOUR ORGANIZATIONCOMPUTATIONAL BUSINESS ANALYTICS PRESENTS TOOLS AND TECHNIQUES FOR DESCRIPTIVE PREDICTIVE AND PRESCRIPTIVE ANALYTICS APPLICABLE ACROSS MULTIPLE DOMAINS THROUGH MANY EXAMPLES AND CHALLENGING CASE STUDIES FROM A VARIETY OF FIELDS PRACTITIONERS EASILY SEE THE CONNECTIONS

Python Data Analysis *2014-10-28*

THIS BOOK IS FOR PROGRAMMERS SCIENTISTS AND ENGINEERS WHO HAVE KNOWLEDGE OF THE PYTHON LANGUAGE AND KNOW THE BASICS OF DATA SCIENCE IT IS FOR THOSE WHO WISH TO LEARN DIFFERENT DATA ANALYSIS METHODS USING PYTHON AND ITS LIBRARIES THIS BOOK CONTAINS ALL THE BASIC INGREDIENTS YOU NEED TO BECOME AN EXPERT DATA ANALYST

The Finite Element Method Using MATLAB 2018-10-03

EXPANDED TO INCLUDE A BROADER RANGE OF PROBLEMS THAN THE BESTSELLING FIRST EDITION FINITE ELEMENT METHOD USING MATLAB SECOND EDITION PRESENTS FINITE ELEMENT APPROXIMATION CONCEPTS FORMULATION AND PROGRAMMING IN A FORMAT THAT EFFECTIVELY STREAMLINES THE LEARNING PROCESS IT IS WRITTEN FROM A GENERAL ENGINEERING AND MATHEMATICAL PERSPECTIVE RATHER THAN THAT OF A SOLID STRUCTURAL MECHANICS BASIS WHAT S NEW IN THE SECOND EDITION EACH CHAPTER IN THE SECOND EDITION NOW INCLUDES AN OVERVIEW THAT OUTLINES THE CONTENTS AND PURPOSE OF EACH CHAPTER THE AUTHORS HAVE ALSO ADDED A NEW CHAPTER OF SPECIAL TOPICS IN APPLICATIONS INCLUDING CRACKS SEMI INFINITE AND INFINITE DOMAINS BUCKLING AND THERMAL STRESS THEY DISCUSS THREE DIFFERENT LINEARIZATION TECHNIQUES TO SOLVE NONLINEAR DIFFERENTIAL EQUATIONS ALSO INCLUDED ARE NEW SECTIONS ON SHELL FORMULATIONS AND MATLAB PROGRAMS THESE ENHANCEMENTS INCREASE THE BOOK S ALREADY SIGNIFICANT VALUE BOTH AS A SELF STUDY TEXT AND A REFERENCE FOR PRACTICING ENGINEERS AND SCIENTISTS

MATLAB® Recipes for Earth Sciences *2015-02-17*

MATLAB IS USED FOR A WIDE RANGE OF APPLICATIONS IN GEOSCIENCES SUCH AS IMAGE PROCESSING IN REMOTE SENSING THE GENERATION AND PROCESSING OF DIGITAL ELEVATION MODELS AND THE ANALYSIS OF TIME SERIES THIS BOOK INTRODUCES METHODS OF DATA ANALYSIS IN GEOSCIENCES USING MATLAB SUCH AS BASIC STATISTICS FOR UNIVARIATE BIVARIATE AND MULTIVARIATE DATASETS TIME SERIES ANALYSIS SIGNAL PROCESSING THE ANALYSIS OF SPATIAL AND DIRECTIONAL DATA AND IMAGE ANALYSIS THE REVISED AND UPDATED FOURTH EDITION INCLUDES SIXTEEN NEW SECTIONS AND MOST CHAPTERS HAVE GREATLY BEEN EXPANDED SO THAT THEY NOW INCLUDE A STEP BY STEP DISCUSSION OF ALL METHODS BEFORE DEMONSTRATING THE METHODS WITH MATLAB FUNCTIONS NEW SECTIONS INCLUDE ARRAY MANIPULATION CONTROL FLOW CREATING GRAPHICAL USER INTERFACES HYPOTHESIS TESTING KOLMOGOROV SMIRNOV TEST MANN WHITNEY TEST ANSARI BRADLEY TEST DETECTING ABRUPT TRANSITIONS IN TIME SERIES EXPORTING 3D GRAPHICS TO CREATE INTERACTIVE DOCUMENTS IMPORTING PROCESSING AND EXPORTING LANDSAT IMAGES IMPORTING AND GEOREFERENCING TERRA ASTER IMAGES PROCESSING AND EXPORTING EO 1 HYPERION IMAGES IMAGE ENHANCEMENT CORRECTION AND RECTIFICATION SHAPE BASED OBJECT DETECTION IN IMAGES DISCRIMINANT ANALYSIS AND MULTIPLE LINEAR REGRESSION THE TEXT INCLUDES NUMEROUS EXAMPLES DEMONSTRATING HOW MATLAB CAN BE USED ON DATA SETS FROM EARTH SCIENCES THE BOOK S SUPPLEMENTARY ELECTRONIC MATERIAL AVAILABLE ONLINE THROUGH SPRINGER LINK INCLUDES RECIPES THAT INCLUDE ALL THE MATLAB COMMANDS FEATURED IN THE BOOK AND THE EXAMPLE DATA

Radar Systems Analysis and Design Using MATLAB *2015-09-15*

DEVELOPED FROM THE AUTHOR S GRADUATE LEVEL COURSES THE FIRST EDITION OF THIS BOOK FILLED THE NEED FOR A COMPREHENSIVE SELF CONTAINED AND HANDS ON TREATMENT OF RADAR SYSTEMS ANALYSIS AND DESIGN IT QUICKLY BECAME A BESTSELLER AND WAS WIDELY ADOPTED BY MANY PROFESSORS THE SECOND EDITION BUILT ON THIS SUCCESSFUL FORMAT BY REARRANGING AND UPDATING TOPICS AND CODE REORGANIZED EXPANDED AND UPDATED RADAR SYSTEMS ANALYSIS AND DESIGN USING MATLAB THIRD EDITION CONTINUES TO HELP GRADUATE STUDENTS AND ENGINEERS UNDERSTAND THE MANY ISSUES INVOLVED IN RADAR SYSTEMS DESIGN AND ANALYSIS EACH CHAPTER INCLUDES THE MATHEMATICAL AND ANALYTICAL COVERAGE NECESSARY FOR OBTAINING A

SOLID UNDERSTANDING OF RADAR THEORY ADDITIONALLY MATLAB FUNCTIONS PROGRAMS IN EACH CHAPTER FURTHER ENHANCE COMPREHENSION OF THE THEORY AND PROVIDE A SOURCE FOR ESTABLISHING RADAR SYSTEM DESIGN REQUIREMENTS INCORPORATING FEEDBACK FROM PROFESSORS AND PRACTICING ENGINEERS THE THIRD EDITION OF THIS BESTSELLING TEXT REFLECTS THE STATE OF THE ART IN THE FIELD AND RESTRUCTURES THE MATERIAL TO BE MORE CONVENIENT FOR COURSE USE IT INCLUDES SEVERAL NEW TOPICS AND MANY NEW END OF CHAPTER PROBLEMS THIS EDITION ALSO TAKES ADVANTAGE OF THE NEW FEATURES IN THE LATEST VERSION OF MATLAB UPDATED MATLAB CODE IS AVAILABLE FOR DOWNLOAD ON THE BOOK S CRC PRESS WEB PAGE

Exploratory Data Analysis with MATLAB *2004-11-29*

EXPLORATORY DATA ANALYSIS EDA WAS CONCEIVED AT A TIME WHEN COMPUTERS WERE NOT WIDELY USED AND THUS COMPUTATIONAL ABILITY WAS RATHER LIMITED AS COMPUTATIONAL SOPHISTICATION HAS INCREASED EDA HAS BECOME AN EVEN MORE POWERFUL PROCESS FOR VISUALIZING AND SUMMARIZING DATA BEFORE MAKING MODEL ASSUMPTIONS TO GENERATE HYPOTHESES ENCOMPASSING LARGER AND MORE COMPLEX DATA SETS THERE ARE MANY RESOURCES FOR THOSE INTERESTED IN THE THEORY OF EDA BUT THIS IS THE FIRST BOOK TO USE MATLAB TO ILLUSTRATE THE COMPUTATIONAL ASPECTS OF THIS DISCIPLINE EXPLORATORY DATA ANALYSIS WITH MATLAB PRESENTS THE METHODS OF EDA FROM A COMPUTATIONAL PERSPECTIVE THE AUTHORS EXTENSIVELY USE MATLAB CODE AND ALGORITHM DESCRIPTIONS TO PROVIDE STATE OF THE ART TECHNIQUES FOR FINDING PATTERNS AND STRUCTURE IN DATA ADDRESSING THEORY THEY ALSO INCORPORATE MANY ANNOTATED REFERENCES TO DIRECT READERS TO THE MORE THEORETICAL ASPECTS OF THE METHODS THE BOOK PRESENTS AN APPROACH USING THE BASIC FUNCTIONS FROM MATLAB AND THE MATLAB STATISTICS TOOLBOX IN ORDER TO BE MORE ACCESSIBLE AND ENDURING IT ALSO CONTAINS PSEUDO CODE TO ENABLE USERS OF OTHER SOFTWARE PACKAGES TO IMPLEMENT THE ALGORITHMS THIS TEXT PLACES THE TOOLS NEEDED TO IMPLEMENT EDA THEORY AT THE FINGERTIPS OF RESEARCHERS APPLIED MATHEMATICIANS COMPUTER SCIENTISTS ENGINEERS AND STATISTICIANS BY USING A PRACTICAL COMPUTATIONAL APPROACH

Basics of MATLAB and Beyond *2019-05-07*

MATLAB THE TREMENDOUSLY POPULAR COMPUTATION NUMERICAL ANALYSIS SIGNAL PROCESSING DATA ANALYSIS AND GRAPHICAL SOFTWARE PACKAGE ALLOWS VIRTUALLY EVERY SCIENTIST AND ENGINEER TO MAKE BETTER AND FASTER PROGRESS AS MATLAB S WORLD WIDE SALES APPROACH A HALF MILLION WITH AN ESTIMATED FOUR MILLION USERS IT BECOMES A NEAR NECESSITY THAT PROFESSIONALS A

SIX BOOKS IN ONE: Classification, Prediction, and Sentiment Analysis Using Machine Learning and Deep Learning with Python GUI *2022-04-11*

BOOK 1 BANK LOAN STATUS CLASSIFICATION AND PREDICTION USING MACHINE LEARNING WITH PYTHON GUI THE DATASET USED IN THIS PROJECT CONSISTS OF MORE THAN 100 000 CUSTOMERS MENTIONING THEIR LOAN STATUS CURRENT LOAN AMOUNT MONTHLY DEBT ETC THERE ARE 19 FEATURES IN THE DATASET THE DATASET ATTRIBUTES ARE AS FOLLOWS LOAN ID CUSTOMER ID LOAN STATUS CURRENT LOAN AMOUNT TERM CREDIT SCORE ANNUAL INCOME YEARS IN CURRENT JOB HOME OWNERSHIP PURPOSE MONTHLY DEBT YEARS OF CREDIT HISTORY MONTHS SINCE LAST DELINQUENT NUMBER OF OPEN ACCOUNTS NUMBER OF CREDIT PROBLEMS CURRENT CREDIT BALANCE MAXIMUM OPEN CREDIT BANKRUPTCIES AND TAX LIENS THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING AND XGB CLASSIFIER THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY BOOK 2 OPINION MINING AND PREDICTION USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI OPINION MINING SOMETIMES KNOWN AS SENTIMENT ANALYSIS OR EMOTION AI REFERS TO THE USE OF NATURAL LANGUAGE PROCESSING TEXT ANALYSIS COMPUTATIONAL LINGUISTICS AND BIOMETRICS TO SYSTEMATICALLY IDENTIFY EXTRACT QUANTIFY AND STUDY AFFECTIVE STATES AND SUBJECTIVE INFORMATION THIS DATASET WAS CREATED FOR THE PAPER FROM GROUP TO INDIVIDUAL LABELS USING DEEP FEATURES KOTZIAS ET AL KDD 2015 IT CONTAINS SENTENCES LABELLED WITH A POSITIVE OR NEGATIVE SENTIMENT SCORE IS EITHER 1 FOR POSITIVE OR 0 FOR NEGATIVE THE SENTENCES COME FROM THREE DIFFERENT WEBSITES FIELDS IMDB COM AMAZON COM AND YELP COM FOR EACH WEBSITE THERE EXIST 500 POSITIVE AND 500 NEGATIVE SENTENCES THOSE WERE SELECTED RANDOMLY FOR LARGER DATASETS OF REVIEWS AMAZON CONTAINS REVIEWS AND SCORES FOR PRODUCTS SOLD ON AMAZON COM IN THE CELL PHONES AND ACCESSORIES CATEGORY AND IS PART OF THE DATASET COLLECTED BY MCAULEY AND LESKOVEC SCORES ARE ON AN INTEGER SCALE FROM 1 TO 5 REVIEWS CONSIDERED WITH A SCORE OF 4 AND 5 TO BE POSITIVE AND SCORES OF 1 AND 2 TO BE NEGATIVE THE DATA IS RANDOMLY PARTITIONED INTO TWO HALVES OF 50 ONE FOR TRAINING AND ONE FOR TESTING WITH 35 000 DOCUMENTS IN EACH SET IMDB REFERS TO THE IMDB MOVIE REVIEW SENTIMENT DATASET ORIGINALLY INTRODUCED BY MAAS ET AL AS A BENCHMARK FOR SENTIMENT ANALYSIS THIS DATASET CONTAINS A TOTAL OF 100 000 MOVIE REVIEWS POSTED ON IMDB COM THERE ARE 50 000 UNLABELED REVIEWS AND THE REMAINING 50 000 ARE DIVIDED INTO A SET OF 25 000 REVIEWS FOR TRAINING AND 25 000 REVIEWS FOR TESTING EACH OF THE LABELED REVIEWS HAS A BINARY SENTIMENT LABEL EITHER POSITIVE OR NEGATIVE YELP REFERS TO THE DATASET FROM THE YELP DATASET CHALLENGE FROM WHICH WE EXTRACTED THE RESTAURANT REVIEWS SCORES ARE ON AN INTEGER SCALE FROM 1 TO 5 REVIEWS CONSIDERED WITH SCORES 4 AND 5 TO BE POSITIVE AND 1 AND 2 TO BE NEGATIVE THE DATA IS RANDOMLY GENERATED A 50 50 TRAINING AND TESTING SPLIT WHICH LED TO APPROXIMATELY 300 000 DOCUMENTS FOR EACH SET SENTENCES FOR EACH OF THE DATASETS ABOVE LABELS ARE EXTRACTED AND MANUALLY 1000 SENTENCES ARE MANUALLY LABELED FROM THE TEST SET WITH 50 POSITIVE SENTIMENT AND 50 NEGATIVE SENTIMENT THESE SENTENCES ARE ONLY USED TO EVALUATE OUR INSTANCE LEVEL CLASSIFIER FOR EACH DATASET3 THEY ARE NOT USED FOR MODEL TRAINING TO MAINTAIN CONSISTENCY WITH OUR OVERALL GOAL OF LEARNING AT A GROUP LEVEL AND PREDICTING AT THE INSTANCE LEVEL THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING AND XGB CLASSIFIER THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY BOOK 3 EMOTION PREDICTION FROM TEXT USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI IN THE DATASET USED IN THIS PROJECT THERE ARE TWO COLUMNS TEXT AND EMOTION QUITE SELF EXPLANATORY THE EMOTION COLUMN HAS VARIOUS CATEGORIES RANGING FROM HAPPINESS TO SADNESS TO LOVE AND FEAR YOU WILL BUILD AND IMPLEMENT MACHINE LEARNING AND DEEP LEARNING MODELS WHICH CAN IDENTIFY WHAT WORDS DENOTE WHAT EMOTION THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING AND XGB CLASSIFIER THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY BOOK 4 HATE SPEECH DETECTION AND SENTIMENT ANALYSIS USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI THE OBJECTIVE OF THIS TASK IS TO DETECT HATE SPEECH IN TWEETS FOR THE SAKE OF SIMPLICITY A TWEET CONTAINS HATE SPEECH IF IT HAS A RACIST OR SEXIST SENTIMENT ASSOCIATED WITH IT SO THE TASK IS TO CLASSIFY RACIST OR SEXIST TWEETS FROM OTHER TWEETS FORMALLY GIVEN A TRAINING SAMPLE OF TWEETS AND LABELS WHERE LABEL 1 DENOTES THE TWEET IS RACIST SEXIST AND LABEL 0 DENOTES THE

TWEET IS NOT RACIST SEXIST THE OBJECTIVE IS TO PREDICT THE LABELS ON THE TEST DATASET THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING XGB CLASSIFIER LSTM AND CNN THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY BOOK 5 TRAVEL REVIEW RATING CLASSIFICATION AND PREDICTION USING MACHINE LEARNING WITH PYTHON GUI THE DATASET USED IN THIS PROJECT HAS BEEN SOURCED FROM THE MACHINE LEARNING REPOSITORY OF UNIVERSITY OF CALIFORNIA IRVINE UC IRVINE TRAVEL REVIEW RATINGS DATA SET THIS DATASET IS POPULATED BY CAPTURING USER RATINGS FROM GOOGLE REVIEWS REVIEWS ON ATTRACTIONS FROM 24 CATEGORIES ACROSS EUROPE ARE CONSIDERED GOOGLE USER RATING RANGES FROM 1 TO 5 AND AVERAGE USER RATING PER CATEGORY IS CALCULATED THE ATTRIBUTES IN THE DATASET ARE AS FOLLOWS ATTRIBUTE 1 UNIQUE USER ID ATTRIBUTE 2 AVERAGE RATINGS ON CHURCHES ATTRIBUTE 3 AVERAGE RATINGS ON RESORTS ATTRIBUTE 4 AVERAGE RATINGS ON BEACHES ATTRIBUTE 5 AVERAGE RATINGS ON PARKS ATTRIBUTE 6 AVERAGE RATINGS ON THEATRES ATTRIBUTE 7 AVERAGE RATINGS ON MUSEUMS ATTRIBUTE 8 AVERAGE RATINGS ON MALLS ATTRIBUTE 9 AVERAGE RATINGS ON ZOO ATTRIBUTE 10 AVERAGE RATINGS ON RESTAURANTS ATTRIBUTE 11 AVERAGE RATINGS ON PUBS BARS ATTRIBUTE 12 AVERAGE RATINGS ON LOCAL SERVICES ATTRIBUTE 13 AVERAGE RATINGS ON BURGER PIZZA SHOPS ATTRIBUTE 14 AVERAGE RATINGS ON HOTELS OTHER LODGINGS ATTRIBUTE 15 AVERAGE RATINGS ON JUICE BARS ATTRIBUTE 16 AVERAGE RATINGS ON ART GALLERIES ATTRIBUTE 17 AVERAGE RATINGS ON DANCE CLUBS ATTRIBUTE 18 AVERAGE RATINGS ON SWIMMING POOLS ATTRIBUTE 19 AVERAGE RATINGS ON GYMS ATTRIBUTE 20 AVERAGE RATINGS ON BAKERIES ATTRIBUTE 21 AVERAGE RATINGS ON BEAUTY SPAS ATTRIBUTE 22 AVERAGE RATINGS ON CAFES ATTRIBUTE 23 AVERAGE RATINGS ON VIEW POINTS ATTRIBUTE 24 AVERAGE RATINGS ON MONUMENTS AND ATTRIBUTE 25 AVERAGE RATINGS ON GARDENS THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING XGB CLASSIFIER AND MLP CLASSIFIER THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY BOOK 6 ONLINE RETAIL CLUSTERING AND PREDICTION USING MACHINE LEARNING WITH PYTHON GUI THE DATASET USED IN THIS PROJECT IS A TRANSNATIONAL DATASET WHICH CONTAINS ALL THE TRANSACTIONS OCCURRING BETWEEN 01 12 2010 AND 09 12 2011 FOR A UK BASED AND REGISTERED NON STORE ONLINE RETAIL THE COMPANY MAINLY SELLS UNIQUE ALL OCCASION GIFTS MANY CUSTOMERS OF THE COMPANY ARE WHOLESALERS YOU WILL BE USING THE ONLINE RETAIL TRANSNATIONAL DATASET TO BUILD A RFM CLUSTERING AND CHOOSE THE BEST SET OF CUSTOMERS WHICH THE COMPANY SHOULD TARGET IN THIS PROJECT YOU WILL PERFORM COHORT ANALYSIS AND RFM ANALYSIS YOU WILL ALSO PERFORM CLUSTERING USING K MEANS TO GET 5 CLUSTERS THE MACHINE LEARNING MODELS USED IN THIS PROJECT TO PREDICT CLUSTERS AS TARGET VARIABLE ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE LGBM GRADIENT BOOSTING XGB AND MLP FINALLY YOU WILL PLOT BOUNDARY DECISION DISTRIBUTION OF FEATURES FEATURE IMPORTANCE CROSS VALIDATION SCORE AND PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY

5 FIVE DATA SCIENCE PROJECTS FOR ANALYSIS, CLASSIFICATION, PREDICTION, AND SENTIMENT ANALYSIS WITH PYTHON GUI 2022-04-29

PROJECT 1 SUPERMARKET SALES ANALYSIS AND PREDICTION USING MACHINE LEARNING WITH PYTHON GUI THE DATASET USED IN THIS PROJECT CONSISTS OF THE GROWTH OF SUPERMARKETS WITH HIGH MARKET COMPETITIONS IN MOST POPULATED CITIES THE DATASET IS ONE OF THE HISTORICAL SALES OF SUPERMARKET COMPANY WHICH HAS RECORDED IN 3 DIFFERENT BRANCHES FOR 3 MONTHS DATA PREDICTIVE DATA ANALYTICS METHODS ARE EASY TO APPLY WITH THIS DATASET ATTRIBUTE INFORMATION IN THE DATASET ARE AS FOLLOWS INVOICE ID COMPUTER GENERATED SALES SLIP INVOICE IDENTIFICATION NUMBER BRANCH BRANCH OF SUPERCENTER 3 BRANCHES ARE AVAILABLE IDENTIFIED BY A B AND C CITY LOCATION OF SUPERCENTERS CUSTOMER TYPE TYPE OF CUSTOMERS RECORDED BY MEMBERS FOR CUSTOMERS USING MEMBER CARD AND NORMAL FOR WITHOUT MEMBER CARD GENDER GENDER TYPE OF CUSTOMER PRODUCT LINE GENERAL ITEM CATEGORIZATION GROUPS ELECTRONIC ACCESSORIES FASHION ACCESSORIES FOOD AND BEVERAGES HEALTH AND BEAUTY HOME AND LIFESTYLE SPORTS AND TRAVEL UNIT PRICE PRICE OF EACH PRODUCT IN QUANTITY NUMBER OF PRODUCTS PURCHASED BY CUSTOMER TAX 5 TAX FEE FOR CUSTOMER BUYING TOTAL TOTAL PRICE INCLUDING TAX DATE DATE OF PURCHASE RECORD AVAILABLE FROM JANUARY 2019 TO MARCH 2019 TIME PURCHASE TIME 10AM TO 9PM PAYMENT PAYMENT USED BY CUSTOMER FOR PURCHASE 3 METHODS ARE AVAILABLE CASH CREDIT CARD AND EWALLET COGS COST OF GOODS SOLD GROSS MARGIN PERCENTAGE GROSS MARGIN PERCENTAGE GROSS INCOME GROSS INCOME AND RATING CUSTOMER STRATIFICATION RATING ON THEIR OVERALL SHOPPING EXPERIENCE ON A SCALE OF 1 TO 10 IN THIS PROJECT YOU WILL PERFORM PREDICTING RATING USING MACHINE LEARNING THE MACHINE LEARNING MODELS USED IN THIS PROJECT TO PREDICT CLUSTERS AS TARGET VARIABLE ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE LGBM GRADIENT BOOSTING XGB AND MLP FINALLY YOU WILL PLOT BOUNDARY DECISION DISTRIBUTION OF FEATURES FEATURE IMPORTANCE CROSS VALIDATION SCORE AND PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY PROJECT 2 DETECTING CYBERBULLYING TWEETS USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI AS SOCIAL MEDIA USAGE BECOMES INCREASINGLY PREVALENT IN EVERY AGE GROUP A VAST MAJORITY OF CITIZENS RELY ON THIS ESSENTIAL MEDIUM FOR DAY TO DAY COMMUNICATION SOCIAL MEDIA S UBIQUITY MEANS THAT CYBERBULLYING CAN EFFECTIVELY IMPACT ANYONE AT ANY TIME OR ANYWHERE AND THE RELATIVE ANONYMITY OF THE INTERNET MAKES SUCH PERSONAL ATTACKS MORE DIFFICULT TO STOP THAN TRADITIONAL BULLYING ON APRIL 15TH 2020 UNICEF ISSUED A WARNING IN RESPONSE TO THE INCREASED RISK OF CYBERBULLYING DURING THE COVID 19 PANDEMIC DUE TO WIDESPREAD SCHOOL CLOSURES INCREASED SCREEN TIME AND DECREASED FACE TO FACE SOCIAL INTERACTION THE STATISTICS OF CYBERBULLYING ARE OUTRIGHT ALARMING 36 5 OF MIDDLE AND HIGH SCHOOL STUDENTS HAVE FELT CYBERBULLIED AND 87 HAVE OBSERVED CYBERBULLYING WITH EFFECTS RANGING FROM DECREASED ACADEMIC PERFORMANCE TO DEPRESSION TO SUICIDAL THOUGHTS IN LIGHT OF ALL OF THIS THIS DATASET CONTAINS MORE THAN 47000 TWEETS LABELLED ACCORDING TO THE CLASS OF CYBERBULLYING AGE ETHNICITY GENDER RELIGION OTHER TYPE OF CYBERBULLYING AND NOT CYBERBULLYING THE DATA HAS BEEN BALANCED IN ORDER TO CONTAIN 8000 OF EACH CLASS THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING XGB CLASSIFIER LSTM AND CNN THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY PROJECT 3 HIGHER EDUCATION STUDENT ACADEMIC PERFORMANCE ANALYSIS AND PREDICTION USING MACHINE LEARNING WITH PYTHON GUI THE DATASET USED IN THIS PROJECT WAS COLLECTED FROM THE FACULTY OF ENGINEERING AND FACULTY OF EDUCATIONAL SCIENCES STUDENTS IN 2019 THE PURPOSE IS TO PREDICT STUDENTS END OF TERM PERFORMANCES USING ML TECHNIQUES ATTRIBUTE INFORMATION IN THE DATASET ARE AS FOLLOWS STUDENT ID STUDENT AGE 1 18 21 2 22 25 3 ABOVE 26 SEX 1 FEMALE 2 MALE GRADUATED HIGH SCHOOL TYPE 1 PRIVATE 2 STATE 3 OTHER SCHOLARSHIP TYPE 1 NONE 2 25 3 50 4 75 5 FULL ADDITIONAL WORK 1 YES 2 NO REGULAR ARTISTIC OR SPORTS ACTIVITY 1 YES 2 NO DO YOU HAVE A PARTNER 1 YES 2 NO TOTAL SALARY IF AVAILABLE 1 USD 135 200 2 USD 201 270 3 USD 271 340 4 USD 341 410 5 ABOVE 410 TRANSPORTATION TO THE UNIVERSITY 1 BUS 2 PRIVATE CAR TAXI 3 BICYCLE 4 OTHER ACCOMMODATION TYPE IN CYPRUS 1 RENTAL 2 DORMITORY 3 WITH FAMILY 4 OTHER MOTHER S EDUCATION 1 PRIMARY SCHOOL 2 SECONDARY SCHOOL 3 HIGH SCHOOL 4 UNIVERSITY 5 MSC 6 PH D FATHER S EDUCATION 1 PRIMARY SCHOOL 2 SECONDARY SCHOOL 3 HIGH SCHOOL 4 UNIVERSITY 5 MSC 6 PH D NUMBER OF SISTERS BROTHERS IF AVAILABLE 1 1 2 2 3 3 4 4 5 5 OR ABOVE PARENTAL STATUS 1 MARRIED 2

DIVORCED 3 DIED ONE OF THEM OR BOTH MOTHER S OCCUPATION 1 RETIRED 2 HOUSEWIFE 3 GOVERNMENT OFFICER 4 PRIVATE SECTOR EMPLOYEE 5 SELF EMPLOYMENT 6 OTHER FATHER S OCCUPATION 1 RETIRED 2 GOVERNMENT OFFICER 3 PRIVATE SECTOR EMPLOYEE 4 SELF EMPLOYMENT 5 OTHER WEEKLY STUDY HOURS 1 NONE 2 5 HOURS 3 6 10 HOURS 4 11 20 HOURS 5 MORE THAN 20 HOURS READING FREQUENCY NON SCIENTIFIC BOOKS JOURNALS 1 NONE 2 SOMETIMES 3 OFTEN READING FREQUENCY SCIENTIFIC BOOKS JOURNALS 1 NONE 2 SOMETIMES 3 OFTEN ATTENDANCE TO THE SEMINARS CONFERENCES RELATED TO THE DEPARTMENT 1 YES 2 NO IMPACT OF YOUR PROJECTS ACTIVITIES ON YOUR SUCCESS 1 POSITIVE 2 NEGATIVE 3 NEUTRAL ATTENDANCE TO CLASSES 1 ALWAYS 2 SOMETIMES 3 NEVER PREPARATION TO MIDTERM EXAMS 1 1 ALONE 2 WITH FRIENDS 3 NOT APPLICABLE PREPARATION TO MIDTERM EXAMS 2 1 CLOSEST DATE TO THE EXAM 2 REGULARLY DURING THE SEMESTER 3 NEVER TAKING NOTES IN CLASSES 1 NEVER 2 SOMETIMES 3 ALWAYS LISTENING IN CLASSES 1 NEVER 2 SOMETIMES 3 ALWAYS DISCUSSION IMPROVES MY INTEREST AND SUCCESS IN THE COURSE 1 NEVER 2 SOMETIMES 3 ALWAYS FLIP CLASSROOM 1 NOT USEFUL 2 USEFUL 3 NOT APPLICABLE CUMULATIVE GRADE POINT AVERAGE IN THE LAST SEMESTER 4 00 1 2 00 2 2 00 2 49 3 2 50 2 99 4 3 00 3 49 5 ABOVE 3 49 EXPECTED CUMULATIVE GRADE POINT AVERAGE IN THE GRADUATION 4 00 1 2 00 2 2 00 2 49 3 2 50 2 99 4 3 00 3 49 5 ABOVE 3 49 COURSE ID AND OUTPUT GRADE 0 FAIL 1 DD 2 DC 3 CC 4 CB 5 BB 6 BA 7 AA THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING AND XGB CLASSIFIER THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY PROJECT 4 COMPANY BANKRUPTCY ANALYSIS AND PREDICTION USING MACHINE LEARNING WITH PYTHON GUI THE DATASET WAS COLLECTED FROM THE TAIWAN ECONOMIC JOURNAL FOR THE YEARS 1999 TO 2009 COMPANY BANKRUPTCY WAS DEFINED BASED ON THE BUSINESS REGULATIONS OF THE TAIWAN STOCK EXCHANGE ATTRIBUTE INFORMATION IN THE DATASET ARE AS FOLLOWS Y BANKRUPT CLASS LABEL X1 ROA C BEFORE INTEREST AND DEPRECIATION BEFORE INTEREST RETURN ON TOTAL ASSETS C X2 ROA A BEFORE INTEREST AND AFTER TAX RETURN ON TOTAL ASSETS A X3 ROA B BEFORE INTEREST AND DEPRECIATION AFTER TAX RETURN ON TOTAL ASSETS B X4 OPERATING GROSS MARGIN GROSS PROFIT NET SALES X5 REALIZED SALES GROSS MARGIN REALIZED GROSS PROFIT NET SALES X6 OPERATING PROFIT RATE OPERATING INCOME NET SALES X7 PRE TAX NET INTEREST RATE PRE TAX INCOME NET SALES X8 AFTER TAX NET INTEREST RATE NET INCOME NET SALES X9 NON INDUSTRY INCOME AND EXPENDITURE REVENUE NET NON OPERATING INCOME RATIO X10 CONTINUOUS INTEREST RATE AFTER TAX NET INCOME EXCLUDE DISPOSAL GAIN OR LOSS NET SALES X11 OPERATING EXPENSE RATE OPERATING EXPENSES NET SALES X12 RESEARCH AND DEVELOPMENT EXPENSE RATE RESEARCH AND DEVELOPMENT EXPENSES NET SALES X13 CASH FLOW RATE CASH FLOW FROM OPERATING CURRENT LIABILITIES X14 INTEREST BEARING DEBT INTEREST RATE INTEREST BEARING DEBT EQUITY X15 TAX RATE A EFFECTIVE TAX RATE X16 NET VALUE PER SHARE B BOOK VALUE PER SHARE B X17 NET VALUE PER SHARE A BOOK VALUE PER SHARE A X18 NET VALUE PER SHARE C BOOK VALUE PER SHARE C X19 PERSISTENT EPS IN THE LAST FOUR SEASONS EPS NET INCOME X20 CASH FLOW PER SHARE X21 REVENUE PER SHARE YUAN SALES PER SHARE X22 OPERATING PROFIT PER SHARE YUAN OPERATING INCOME PER SHARE X23 PER SHARE NET PROFIT BEFORE TAX YUAN PRETAX INCOME PER SHARE X24 REALIZED SALES GROSS PROFIT GROWTH RATE X25 OPERATING PROFIT GROWTH RATE OPERATING INCOME GROWTH X26 AFTER TAX NET PROFIT GROWTH RATE NET INCOME GROWTH X27 REGULAR NET PROFIT GROWTH RATE CONTINUING OPERATING INCOME AFTER TAX GROWTH X28 CONTINUOUS NET PROFIT GROWTH RATE NET INCOME EXCLUDING DISPOSAL GAIN OR LOSS GROWTH X29 TOTAL ASSET GROWTH RATE TOTAL ASSET GROWTH X30 NET VALUE GROWTH RATE TOTAL EQUITY GROWTH X31 TOTAL ASSET RETURN GROWTH RATE RATIO RETURN ON TOTAL ASSET GROWTH X32 CASH REINVESTMENT CASH REINVESTMENT RATIO X33 CURRENT RATIO X34 QUICK RATIO ACID TEST X35 INTEREST EXPENSE RATIO INTEREST EXPENSES TOTAL REVENUE X36 TOTAL DEBT TOTAL NET WORTH TOTAL LIABILITY EQUITY RATIO X37 DEBT RATIO LIABILITY TOTAL ASSETS X38 NET WORTH ASSETS EQUITY TOTAL ASSETS X39 LONG TERM FUND SUITABILITY RATIO A LONG TERM LIABILITY EQUITY FIXED ASSETS X40 BORROWING DEPENDENCY COST OF INTEREST BEARING DEBT X41 CONTINGENT LIABILITIES NET WORTH CONTINGENT LIABILITY EQUITY X42 OPERATING PROFIT PAID IN CAPITAL OPERATING INCOME CAPITAL X43 NET PROFIT BEFORE TAX PAID IN CAPITAL PRETAX INCOME CAPITAL X44 INVENTORY AND ACCOUNTS RECEIVABLE NET VALUE INVENTORY ACCOUNTS RECEIVABLES EQUITY X45 TOTAL ASSET TURNOVER X46 ACCOUNTS RECEIVABLE TURNOVER X47 AVERAGE COLLECTION DAYS DAYS RECEIVABLE OUTSTANDING X48 INVENTORY TURNOVER RATE TIMES X49 FIXED ASSETS TURNOVER FREQUENCY X50 NET WORTH TURNOVER RATE TIMES EQUITY TURNOVER X51 REVENUE PER PERSON SALES PER EMPLOYEE X52 OPERATING PROFIT PER PERSON OPERATION INCOME PER EMPLOYEE X53 ALLOCATION RATE PER PERSON FIXED ASSETS PER EMPLOYEE X54 WORKING CAPITAL TO TOTAL ASSETS X55 QUICK ASSETS TOTAL ASSETS X56 CURRENT ASSETS TOTAL ASSETS X57 CASH TOTAL ASSETS X58 QUICK ASSETS CURRENT LIABILITY X59 CASH CURRENT LIABILITY X60 CURRENT LIABILITY TO ASSETS X61 OPERATING FUNDS TO LIABILITY X62 INVENTORY WORKING CAPITAL X63 INVENTORY CURRENT LIABILITY X64 CURRENT LIABILITIES LIABILITY X65 WORKING CAPITAL EQUITY X66 CURRENT LIABILITIES EQUITY X67 LONG TERM LIABILITY TO CURRENT ASSETS X68 RETAINED EARNINGS TO TOTAL ASSETS X69 TOTAL INCOME TOTAL EXPENSE X70 TOTAL EXPENSE ASSETS X71 CURRENT ASSET TURNOVER RATE CURRENT ASSETS TO SALES X72 QUICK ASSET TURNOVER RATE QUICK ASSETS TO SALES X73 WORKING CAPITCAL TURNOVER RATE WORKING CAPITAL TO SALES X74 CASH TURNOVER RATE CASH TO SALES X75 CASH FLOW TO SALES X76 FIXED ASSETS TO ASSETS X77 CURRENT LIABILITY TO LIABILITY X78 CURRENT LIABILITY TO EQUITY X79 EQUITY TO LONG TERM LIABILITY X80 CASH FLOW TO TOTAL ASSETS X81 CASH FLOW TO LIABILITY X82 CFO TO ASSETS X83 CASH FLOW TO EQUITY X84 CURRENT LIABILITY TO CURRENT ASSETS X85 LIABILITY ASSETS FLAG 1 IF TOTAL LIABILITY EXCEEDS TOTAL ASSETS 0 OTHERWISE X86 NET INCOME TO TOTAL ASSETS X87 TOTAL ASSETS TO GNP PRICE X88 NO CREDIT INTERVAL X89 GROSS PROFIT TO SALES X90 NET INCOME TO STOCKHOLDER S EQUITY X91 LIABILITY TO EQUITY X92 DEGREE OF FINANCIAL LEVERAGE DFL X93 INTEREST COVERAGE RATIO INTEREST EXPENSE TO EBIT X94 NET INCOME FLAG 1 IF NET INCOME IS NEGATIVE FOR THE LAST TWO YEARS 0 OTHERWISE AND X95 EQUITY TO LIABILITYS THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING AND XGB CLASSIFIER THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY PROJECT 5 DATA SCIENCE FOR RAIN CLASSIFICATION AND PREDICTION WITH PYTHON GUI THIS DATASET CONTAINS ABOUT 10 YEARS OF DAILY WEATHER OBSERVATIONS FROM MANY LOCATIONS ACROSS AUSTRALIA RAINTOMORROW IS THE TARGET VARIABLE TO PREDICT YOU WILL DETERMINE RAIN OR NOT IN THE NEXT DAY THIS COLUMN IS YES IF THE RAIN FOR THAT DAY WAS 1MM OR MORE OBSERVATIONS WERE DRAWN FROM NUMEROUS WEATHER STATIONS THE DAILY OBSERVATIONS ARE AVAILABLE FROM BOM GOV AU CLIMATE DATA THE DATASET CONTAINS 23 ATTRIBUTES SOME OF THEM ARE AS FOLLOWS ABOUT SOME OF THEM ARE DATE THE DATE OF OBSERVATION LOCATION THE COMMON NAME OF THE LOCATION OF THE WEATHER STATION MINTEMP THE MINIMUM TEMPERATURE IN DEGREES CELSIUS MAXTEMP THE MAXIMUM TEMPERATURE IN DEGREES CELSIUS RAINFALL THE AMOUNT OF RAINFALL RECORDED FOR THE DAY IN MM EVAPORATION THE SO CALLED CLASS A PAN EVAPORATION MM IN THE 24 HOURS TO 9AM SUNSHINE THE NUMBER OF HOURS OF BRIGHT SUNSHINE IN THE DAY WINDGUESTDIR THE DIRECTION OF THE STRONGEST WIND GUST IN THE 24 HOURS TO MIDNIGHT WINDGUESTSPEED THE SPEED KM H OF THE STRONGEST WIND GUST IN THE 24 HOURS TO MIDNIGHT AND WINDDIR9AM DIRECTION OF THE WIND AT 9AM THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING AND XGB CLASSIFIER THREE FEATURE SCALING USED IN MACHINE LEARNING ARE RAW MINMAX SCALER AND STANDARD SCALER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE DECISION BOUNDARIES PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY

THREE PROJECTS: Sentiment Analysis and Prediction Using Machine Learning and Deep *Learning with Python GUI 2022-03-21*

project 1 text processing and sentiment analysis using machine learning and deep learning with python gui twitter data used in this project was scraped from february of 2015 and contributors were asked to first classify positive negative and neutral tweets followed by categorizing negative reasons such as late flight or rude service this data was originally posted by crowdflower last february and includes tweets about 6 major us airlines additionally crowdflower had their workers extract the sentiment from the tweet as well as what the passenger was dissapointed about if the tweet was negative the information of main attributes for this project are as follows airline sentiment sentiment classification positivie neutral and negative negativereason reason selected for the negative opinion airline name of 6 us airlines delta united southwest us airways virgin america american and text customer s opinion the models used in this project are k nearest neighbor random forest naive bayes logistic regression decision tree support vector machine adaboost lgbm classifier gradient boosting and xgb classifier and lstm three vectorizers used in machine learning are hashing vectorizer count vectorizer and tfid vectorizer finally you will develop a gui using pyqt5 to plot cross validation score predicted values versus true values confusion matrix learning curve performance of the model scalability of the model training loss and training accuracy project 2 hotel review sentiment analysis using machine learning and deep learning with python gui the data used in this project is the data published by anurag sharma about hotel reviews that were given by costumers the data is given in two files a train and test the train csv is the training data containing unique user id for each entry with the review entered by a costumer and the browser and device used the target variable is is response a variable that states whether the costumers was happy or not happy while staying in the hotel this type of variable makes the project to a classification problem the test csv is the testing data contains similar headings as the train data without the target variable the models used in this project are k nearest neighbor random forest naive bayes logistic regression decision tree support vector machine adaboost lgbm classifier gradient boosting and xgb classifier and lstm three vectorizers used in machine learning are hashing vectorizer count vectorizer and tfid vectorizer finally you will develop a gui using pyqt5 to plot cross validation score predicted values versus true values confusion matrix learning curve performance of the model scalability of the model training loss and training accuracy project 3 student academic performance analysis and prediction using machine learning with python gui the dataset used in this project consists of student achievement in secondary education of two portuguese schools the data attributes include student grades demographic social and school related features and it was collected by using school reports and questionnaires two datasets are provided regarding the performance in two distinct subjects mathematics mat and portuguese language por in the two datasets were modeled under binary five level classification and regression tasks important note the target attribute g3 has a strong correlation with attributes g2 and g1 this occurs because g3 is the final year grade issued at the 3rd period while g1 and g2 correspond to the 1st and 2nd period grades it is more difficult to predict g3 without g2 and g1 but such prediction is much more useful attributes in the dataset are as follows school student s school binary gp gabriel pereira or ms mousinho da silveira sex student s sex binary f female or m male age student s age numeric from 15 to 22 address student s home address type binary u urban or r rural famsize family size binary le3 less or equal to 3 or gt3 greater than 3 pstatus parent s cohabitation status binary t living together or a apart medu mother s education numeric 0 none 1 primary education 4th grade 2 5th to 9th grade 3 secondary education or 4 higher education fedu father s education numeric 0 none 1 primary education 4th grade 2 5th to 9th grade 3 secondary education or 4 higher education mjob mother s job nominal teacher health care related civil services e g administrative or police at home or other fjob father s job nominal teacher health care related civil services e g administrative or police at home or other reason reason to choose this school nominal close to home school reputation course preference or other guardian student s guardian nominal mother father or other traveltime home to school travel time numeric 1 15 min 2 15 to 30 min 3 30 min to 1 hour or 4 1 hour studytime weekly study time numeric 1 2 hours 2 2 to 5 hours 3 5 to 10 hours or 4 10 hours failures number of past class failures numeric n if 1 n 3 else 4 schoolsup extra educational support binary yes or no famsup family educational support binary yes or no paid extra paid classes within the course subject math or portuguese binary yes or no activities extra curricular activities binary yes or no nursery attended nursery school binary yes or no higher wants to take higher education binary yes or no internet internet access at home binary yes or no romantic with a romantic relationship binary yes or no famrel quality of family relationships numeric from 1 very bad to 5 excellent freetime free time after school numeric from 1 very low to 5 very high goout going out with friends numeric from 1 very low to 5 very high dalc workday alcohol consumption numeric from 1 very low to 5 very high walc weekend alcohol consumption numeric from 1 very low to 5 very high health current health status numeric from 1 very bad to 5 very good absences number of school absences numeric from 0 to 93 g1 first period grade numeric from 0 to 20 g2 second period grade numeric from 0 to 20 and g3 final grade numeric from 0 to 20 output target the models used in this project are k nearest neighbor random forest naive bayes logistic regression decision tree support vector machine adaboost lgbm classifier gradient boosting and xgb classifier three feature scaling used in machine learning are raw minmax scaler and standard scaler finally you will develop a gui using pyqt5 to plot cross validation score predicted values versus true values confusion matrix learning curve decision boundaries performance of the model scalability of the model training loss and training accuracy

Applied Numerical Analysis with MATLAB®/Simulink® *2022-12-14*

this textbook provides a compact but comprehensive treatment that guides students through applied numerical analysis using matlab simulink ideal as a hands on source for courses in numerical analysis this text focuses on solving problems using market standard software corresponding to all key concepts covered in the classroom the author uses his extensive classroom experience to guide students toward deeper understanding of key concepts while they gain facility with software they will need to master for later studies and practical use in their engineering careers

Control System Analysis & Design in MATLAB and SIMULINK *2014-06-20*

control system analysis design in matlab and simulink is blueprinted to solve undergraduate control system engineering problems in matlab platform unified view of control system fundamentals is taken into account in the text one key aspect of the text is the presentation of computing and graphing materials in a simple intuitive way many advances in virtual implementation on control systems have been seen in the past decade the text elucidates the web of concepts underpinning these advances self working out illustrations and end of chapter exercises enthuse the reader a checkup on thorough understanding the comprehensive introduction will benefit both undergraduates and graduates studying control system and engineering also researchers in the field can have the text as reference

HOTEL REVIEW: SENTIMENT ANALYSIS USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI *2022-03-15*

THE DATA USED IN THIS PROJECT IS THE DATA PUBLISHED BY ANURAG SHARMA ABOUT HOTEL REVIEWS THAT WERE GIVEN BY COSTUMERS THE DATA IS GIVEN IN TWO FILES A TRAIN AND TEST THE TRAIN CSV IS THE TRAINING DATA CONTAINING UNIQUE USER ID FOR EACH ENTRY WITH THE REVIEW ENTERED BY A COSTUMER AND THE BROWSER AND DEVICE USED THE TARGET VARIABLE IS IS RESPONSE A VARIABLE THAT STATES WHETHER THE COSTUMERS WAS HAPPY OR NOT HAPPY WHILE STAYING IN THE HOTEL THIS TYPE OF VARIABLE MAKES THE PROJECT TO A CLASSIFICATION PROBLEM THE TEST CSV IS THE TESTING DATA CONTAINS SIMILAR HEADINGS AS THE TRAIN DATA WITHOUT THE TARGET VARIABLE THE MODELS USED IN THIS PROJECT ARE K NEAREST NEIGHBOR RANDOM FOREST NAIVE BAYES LOGISTIC REGRESSION DECISION TREE SUPPORT VECTOR MACHINE ADABOOST LGBM CLASSIFIER GRADIENT BOOSTING AND XGB CLASSIFIER AND LSTM THREE VECTORIZERS USED IN MACHINE LEARNING ARE HASHING VECTORIZER COUNT VECTORIZER AND TFID VECTORIZER FINALLY YOU WILL DEVELOP A GUI USING PYQT5 TO PLOT CROSS VALIDATION SCORE PREDICTED VALUES VERSUS TRUE VALUES CONFUSION MATRIX LEARNING CURVE PERFORMANCE OF THE MODEL SCALABILITY OF THE MODEL TRAINING LOSS AND TRAINING ACCURACY

HATE SPEECH DETECTION AND SENTIMENT ANALYSIS USING MACHINE LEARNING AND DEEP LEARNING WITH PYTHON GUI 2023-08-04

THE PURPOSE OF THIS PROJECT IS TO DEVELOP A COMPREHENSIVE HATE SPEECH DETECTION AND SENTIMENT ANALYSIS SYSTEM USING BOTH MACHINE LEARNING AND DEEP LEARNING TECHNIQUES THE PROJECT AIMS TO CREATE A ROBUST AND ACCURATE SYSTEM THAT CAN AUTOMATICALLY IDENTIFY HATE SPEECH IN TEXT DATA AND PERFORM SENTIMENT ANALYSIS TO DETERMINE THE EMOTIONS AND OPINIONS EXPRESSED IN THE TEXT THE PROJECT IS DESIGNED TO ADDRESS THE GROWING CONCERN OVER THE SPREAD OF HATE SPEECH AND OFFENSIVE CONTENT ONLINE BY IMPLEMENTING AN AUTOMATED DETECTION SYSTEM IT CAN HELP SOCIAL MEDIA PLATFORMS CONTENT MODERATORS AND ONLINE COMMUNITIES TO PROACTIVELY IDENTIFY AND REMOVE HARMFUL CONTENT FOSTERING A SAFER AND MORE INCLUSIVE ONLINE ENVIRONMENT ADDITIONALLY SENTIMENT ANALYSIS PLAYS A CRUCIAL ROLE IN UNDERSTANDING PUBLIC OPINIONS CUSTOMER FEEDBACK AND SOCIAL MEDIA TRENDS BY ACCURATELY PREDICTING SENTIMENT BUSINESSES CAN MAKE DATA DRIVEN DECISIONS IMPROVE CUSTOMER SATISFACTION AND GAIN VALUABLE INSIGHTS INTO CONSUMER PREFERENCES THIS PROJECT FOCUSES ON HATE SPEECH DETECTION AND SENTIMENT ANALYSIS USING BOTH MACHINE LEARNING AND DEEP LEARNING TECHNIQUES IT BEGINS WITH EXPLORING THE DATASET ANALYZING FEATURE DISTRIBUTIONS AND PREDICTING SENTIMENT USING MACHINE LEARNING MODELS LIKE LOGISTIC REGRESSION SUPPORT VECTOR MACHINES K NEAREST NEIGHBORS DECISION TREES RANDOM FORESTS GRADIENT BOOSTING EXTREME GRADIENT BOOSTING LIGHT GRADIENT BOOSTING AND ADABOOST WHILE OPTIMIZING THEIR PERFORMANCE THROUGH GRID SEARCH FOR HYPERPARAMETER TUNING SUBSEQUENTLY DEEP LEARNING LSTM AND 1D CNN MODELS ARE IMPLEMENTED FOR SENTIMENT ANALYSIS TO CAPTURE LONG TERM DEPENDENCIES AND LOCAL PATTERNS IN THE TEXT DATA THE PROJECT STARTS WITH EXPLORING THE DATASET UNDERSTANDING ITS STRUCTURE AND ANALYZING THE DISTRIBUTION OF CLASSES FOR HATE SPEECH AND SENTIMENT LABELS THIS INITIAL STEP ALLOWS US TO GAIN INSIGHTS INTO THE DATASET AND POTENTIAL CHALLENGES AFTER EXPLORING THE DATA THE DISTRIBUTION OF TEXT FEATURES SUCH AS WORD FREQUENCY AND SENTIMENT SCORES IS ANALYZED TO IDENTIFY ANY PATTERNS OR BIASES THAT COULD IMPACT THE MODEL S PERFORMANCE THE DATASET IS THEN DIVIDED INTO TRAINING VALIDATION AND TESTING SETS TO EVALUATE THE MODELS GENERALIZATION CAPABILITIES EARLY STOPPING TECHNIQUES ARE UTILIZED DURING TRAINING TO PREVENT OVERFITTING AND ENHANCE MODEL GENERALIZATION PERFORMANCE EVALUATION INVOLVES CALCULATING METRICS LIKE ACCURACY PRECISION RECALL AND F1 SCORE TO GAUGE THE MODELS EFFECTIVENESS CONFUSION MATRICES AND VISUALIZATIONS PROVIDE FURTHER INSIGHTS INTO MODEL PREDICTIONS AND POTENTIAL AREAS FOR IMPROVEMENT A GRAPHICAL USER INTERFACE GUI IS DEVELOPED USING PYQT TO FACILITATE USER INTERACTION WITH THE HATE SPEECH DETECTION AND SENTIMENT ANALYSIS SYSTEM BEFORE TRAINING THE DEEP LEARNING MODELS THE TEXT DATA IS TOKENIZED AND PADDED FOR UNIFORM INPUT SEQUENCES THE DATASET IS SPLIT INTO TRAINING AND VALIDATION SETS FOR MODEL EVALUATION AND EARLY STOPPING IS USED TO PREVENT OVERFITTING DURING TRAINING THE FINAL SYSTEM COMBINES PREDICTIONS FROM BOTH MACHINE LEARNING AND DEEP LEARNING MODELS TO PROVIDE ROBUST SENTIMENT ANALYSIS RESULTS THE PYQT GUI ALLOWS USERS TO INPUT TEXT AND RECEIVE REAL TIME SENTIMENT ANALYSIS PREDICTIONS THE LSTM AND 1D CNN MODELS ALONG WITH THEIR OPTIMIZED HYPERPARAMETERS ARE SAVED AND DEPLOYED FOR FUTURE SENTIMENT ANALYSIS TASKS USERS CAN INTERACT WITH THE GUI ANALYZE SENTIMENT IN DIFFERENT TEXTS AND PROVIDE FEEDBACK FOR CONTINUOUS IMPROVEMENT OF THE HATE SPEECH DETECTION AND SENTIMENT ANALYSIS SYSTEM

Analysing Student Feedback in Higher Education *2021-12-29*

ANALYSING STUDENT FEEDBACK IN HIGHER EDUCATION PROVIDES AN IN DEPTH ANALYSIS OF MINING STUDENT FEEDBACK THAT GOES BEYOND NUMERICAL MEASURES OF STUDENT SATISFACTION OR ENGAGEMENT BY INCLUDING AUTHENTIC STUDENT VOICES FOR UNDERSTANDING THE STUDENT EXPERIENCE THIS BOOK WILL INFORM STRATEGIES FOR QUALITY IMPROVEMENT IN HIGHER EDUCATION GLOBALLY WITH CONTRIBUTIONS REPRESENTING AN INTERNATIONAL COMMUNITY OF ACADEMICS EDUCATIONAL DEVELOPERS INSTITUTIONAL DATA ANALYSTS AND STUDENT RESEARCHERS THIS BOOK REFLECTS ON THE ROLE OF COMPUTER AIDED TEXT ANALYSIS IN GAINING INSIGHT OF STUDENT VIEWS THE CHAPTERS EXPLORE THE APPLICATIONS OF TEXT MINING IN DIFFERENT FORMS THESE INCLUDE VARIED INSTITUTIONAL CONTEXTS USING A RANGE OF INSTRUMENTS AND PURSUING DIFFERENT INSTITUTIONAL AIMS AND OBJECTIVES CONTRIBUTORS PROVIDE INSIGHTS ENABLED BY COMPUTER AIDED ANALYSIS IN DISTILLING THE STUDENT VOICE AND TURNING LARGE VOLUMES OF DATA INTO USEFUL INFORMATION AND KNOWLEDGE TO INFORM ACTIONS PRACTICAL TIPS AND CORE PRINCIPLES ARE EXPLORED TO ASSIST ACADEMIC INSTITUTIONS WHEN EMBARKING ON ANALYSING QUALITATIVE STUDENT FEEDBACK WRITTEN FOR A WIDE AUDIENCE ANALYSING STUDENT FEEDBACK IN HIGHER EDUCATION PROVIDES THOSE MAKING INFORMED DECISIONS ABOUT HOW TO APPROACH ANALYSES OF LARGE VOLUMES OF STUDENT NARRATIVES WITH THE BENEFIT OF LEARNING FROM THE EXPERIENCES OF THOSE WHO ALREADY STARTED TREADING THIS PATH IT ENABLES ACADEMIC DEVELOPERS INSTITUTIONAL RESEARCHERS ACADEMICS AND ADMINISTRATORS TO SEE HOW BRINGING TEXT MINING TO THEIR INSTITUTIONS CAN HELP THEM IN BETTER UNDERSTANDING AND USING THE STUDENT VOICE TO IMPROVE PRACTICE

Linear Feedback Control *2007-01-01*

THIS BOOK DISCUSSES ANALYSIS AND DESIGN TECHNIQUES FOR LINEAR FEEDBACK CONTROL SYSTEMS USING MATLAB SOFTWARE BY REDUCING THE MATHEMATICS INCREASING MATLAB WORKING EXAMPLES AND INSERTING SHORT SCRIPTS AND PLOTS WITHIN THE TEXT THE AUTHORS HAVE CREATED A RESOURCE SUITABLE FOR ALMOST ANY TYPE OF USER THE BOOK BEGINS WITH A SUMMARY OF THE PROPERTIES OF LINEAR SYSTEMS AND ADDRESSES MODELING AND MODEL REDUCTION ISSUES IN THE SUBSEQUENT CHAPTERS ON ANALYSIS THE AUTHORS INTRODUCE TIME DOMAIN COMPLEX PLANE AND FREQUENCY DOMAIN TECHNIQUES THEIR COVERAGE OF DESIGN INCLUDES DISCUSSIONS ON MODEL BASED CONTROLLER DESIGNS PID CONTROLLERS AND ROBUST CONTROL DESIGNS A UNIQUE ASPECT OF THE BOOK IS ITS INCLUSION OF A CHAPTER ON FRACTIONAL ORDER CONTROLLERS WHICH ARE USEFUL IN CONTROL ENGINEERING PRACTICE

Natural Language Processing for Global and Local Business *2020-07-31*

THE CONCEPT OF NATURAL LANGUAGE PROCESSING HAS BECOME ONE OF THE PREFERRED METHODS TO BETTER UNDERSTAND CONSUMERS ESPECIALLY IN RECENT YEARS WHEN DIGITAL TECHNOLOGIES AND RESEARCH METHODS HAVE DEVELOPED EXPONENTIALLY IT HAS BECOME APPARENT THAT WHEN RESPONDING TO INTERNATIONAL CONSUMERS THROUGH MULTIPLE PLATFORMS AND SPEAKING IN THE SAME LANGUAGE IN WHICH THE CONSUMERS EXPRESS THEMSELVES COMPANIES ARE IMPROVING THEIR STANDINGS WITHIN THE PUBLIC SPHERE NATURAL LANGUAGE PROCESSING FOR GLOBAL AND LOCAL BUSINESS PROVIDES RESEARCH EXPLORING THE THEORETICAL AND PRACTICAL PHENOMENON OF NATURAL LANGUAGE PROCESSING THROUGH DIFFERENT LANGUAGES AND PLATFORMS IN TERMS OF TODAY S CONDITIONS FEATURING COVERAGE ON A BROAD RANGE OF TOPICS SUCH AS COMPUTATIONAL LINGUISTICS INFORMATION ENGINEERING AND TRANSLATION TECHNOLOGY THIS BOOK IS IDEALLY DESIGNED FOR IT SPECIALISTS ACADEMICS RESEARCHERS STUDENTS AND BUSINESS PROFESSIONALS SEEKING CURRENT RESEARCH ON IMPROVING AND UNDERSTANDING THE CONSUMER EXPERIENCE

MATLAB Guide, Third Edition 2016-12-27

MATLAB IS AN INTERACTIVE SYSTEM FOR NUMERICAL COMPUTATION THAT IS WIDELY USED FOR TEACHING AND RESEARCH IN INDUSTRY AND ACADEMIA IT PROVIDES A MODERN PROGRAMMING LANGUAGE AND PROBLEM SOLVING ENVIRONMENT WITH POWERFUL DATA STRUCTURES CUSTOMIZABLE GRAPHICS AND EASY TO USE EDITING AND DEBUGGING TOOLS THIS THIRD EDITION OF MATLAB GUIDE COMPLETELY REVISES AND UPDATES THE BEST SELLING SECOND EDITION AND IS MORE THAN 30 PERCENT LONGER THE BOOK REMAINS A LIVELY CONCISE INTRODUCTION TO THE MOST POPULAR AND IMPORTANT FEATURES OF MATLAB AND THE SYMBOLIC MATH TOOLBOX KEY FEATURES ARE A TUTORIAL IN CHAPTER 1 THAT GIVES A HANDS ON OVERVIEW OF MATLAB A THOROUGH TREATMENT OF MATLAB MATHEMATICS INCLUDING THE LINEAR ALGEBRA AND NUMERICAL ANALYSIS FUNCTIONS AND THE DIFFERENTIAL EQUATION SOLVERS AND A WEB PAGE AT SIAM ORG BOOKS OT150 THAT PROVIDES EXAMPLE PROGRAM FILES UPDATES AND LINKS TO MATLAB RESOURCES THE NEW EDITION CONTAINS COLOR FIGURES THROUGHOUT INCLUDES PITHY DISCUSSIONS OF RELATED TOPICS IN NEW ASIDES BOXES THAT AUGMENT THE TEXT HAS NEW CHAPTERS ON THE PARALLEL COMPUTING TOOLBOX OBJECT ORIENTED PROGRAMMING GRAPHS AND LARGE DATA SETS COVERS IMPORTANT NEW MATLAB DATA TYPES SUCH AS CATEGORICAL ARRAYS STRING ARRAYS TALL ARRAYS TABLES AND TIMETABLES CONTAINS MORE ON MATLAB WORKFLOW INCLUDING THE LIVE EDITOR AND UNIT TESTS AND FULLY REFLECTS MAJOR UPDATES TO THE MATLAB GRAPHICS SYSTEM THIS BOOK IS SUITABLE FOR BOTH BEGINNERS AND MORE EXPERIENCED USERS INCLUDING STUDENTS RESEARCHERS AND PRACTITIONERS

Introduction to MATLAB with Numerical Preliminaries *2005*

HARNESS THE POWER OF MATLAB TO ANALYZE COMPLEX PROBLEMS WITH MATRICES INTRODUCTION TO MATLAB WITH NUMERICAL PRELIMINARIES PROVIDES THOROUGH TRAINING FOR USING MATLAB SOFTWARE WITH AN EMPHASIS ON SCIENTIFIC COMPUTING READERS LEARN HOW TO APPLY THEIR KNOWLEDGE TO A VARIETY OF FIELDS INCLUDING LINEAR ALGEBRA PROBABILITY FINANCE ECOLOGY AND DISCRETE MATHEMATICS THE TEXT CAREFULLY BALANCES ITS COVERAGE AMONG FOUR PEDAGOGICAL COMPONENTS ANALYTIC CONCEPTS GEOMETRIC CONCEPTS PROGRAMS AND ALGORITHMS AND APPLICATIONS DETAILED PROBLEM SETS BUILD THE READER S UNDERSTANDING AND COMPETENCE IN EACH OF THESE AREAS ALL THE TOOLS NEEDED TO MASTER AND EXPLOIT ALL THE POWERFUL FEATURES OF MATLAB ARE PROVIDED EXERCISES FOR THE READER USED THROUGHOUT THE TEXT THAT TEST READERS UNDERSTANDING OF KEY CONCEPTS HELPING THEM TO MOVE ON TO MORE ADVANCED TOPICS AND APPLICATIONS COMPLETE SOLUTIONS ARE GIVEN IN AN APPENDIX ILLUSTRATIVE EXAMPLES PROVIDED THROUGHOUT THE TEXT THAT DEMONSTRATE MATLAB S ABILITY TO ANALYZE AN ASSORTMENT OF DATASETS EXTENSIVE COVERAGE OF MATLAB S GRAPHICAL CAPABILITIES ENABLING READERS TO EXPRESS SOLUTIONS TO PROBLEMS USING HIGH QUALITY GRAPHICS EXPLANATIONS THAT ARE RIGOROUS YET WRITTEN IN A VERY ACCESSIBLE USER FRIENDLY STYLE EXTENSIVE PROBLEM SETS PROVIDED AT THE END OF EACH SECTION THAT ENABLE READERS TO APPLY THEIR KNOWLEDGE AS ONE OF THE MOST POPULAR MATHEMATICAL SOFTWARE PACKAGES USED IN A WIDE RANGE OF FIELDS INCLUDING BIOLOGY PHYSICS ENGINEERING BUSINESS AND FINANCE THIS IS ESSENTIAL KNOWLEDGE FOR ANYONE WHO MAY NEED TO ANALYZE DATA MOREOVER THE AUTHOR PROVES HOW EASY MATLAB IS TO LEARN INCLUDING MASTERING ITS TREMENDOUS GRAPHICAL CAPABILITIES ALL THAT IS NEEDED IS A BASIC UNDERSTANDING OF SINGLE VARIABLE CALCULUS THIS IS AN EXCELLENT TEXT FOR ANY COURSE IN MATLAB OR SCIENTIFIC COMPUTING ADDITIONALLY IT SERVES AS A SUPPLEMENTARY TEXT FOR ANY MATHEMATICS OR SCIENCE COURSE THAT MAKES USE OF MATLAB

- eleanor roosevelt papers (PDF)
- guided the divisive politics of slavery answer (Read Only)
- chemistry 2 paper 5070 Full PDF
- general biology lab manual fourth edition answers Copy
- railway engineering by mm agarwal (PDF)
- fundamental mechanics of fluids currie 4th edition (PDF)
- 2006 gmc 3500 engine diagram Copy
- samsung video accessories manual (PDF)
- couples argument resolution (Download Only)
- siemens s7 1200 training manual Full PDF
- march maths common paper 2014 memorandum [PDF]
- eog study guide 6th grade science [PDF]
- photosynthesis review worksheet answers (PDF)
- abstract algebra david s dummit [PDF]
- everyday paleo sarah fragoso Copy
- toyota corolla fx 16 user manual Copy
- embedded systems raj kamal second edition text Full PDF
- blue dragon dark heavens 3 kylie chan (2023)
- senuke guide download Full PDF
- solid mensuration solution manual earnhart (Read Only)
- every day gets a little closer twice told therapy irvin d yalom (Read Only)
- kuvempu university question papers (Read Only)