1. Record Nr. UNINA9910767506903321

Autore	Teoh Teik Toe
Titolo	Artificial Intelligence in Business Management / / Teik Toe Teoh and Yu Jin Goh
Pubbl/distr/stampa	Singapore : , : Springer, , [2023] ©2023
ISBN	981-9945-58-5
Edizione	[First edition.]
Descrizione fisica	1 online resource (385 pages)
Collana	Machine Learning
Disciplina	658
Soggetti	Industrial management - Technological innovations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Acknowledgments -- Contents -- Part I Artificial Intelligence Algorithms -- 1 Introduction to Artificial Intelligence -- 1.1 Introduction -- 1.2 History of Artificial Intelligence -- 1.3 Types of Artificial Intelligence Algorithms -- 1.4 Organization of the Book -- References -- 2 Regression -- 2.1 Linear Regression -- 2.2 Decision Tree Regression -- 2.3 Random Forests -- 2.4 Neural Network -- 2.5 Improving Regression Performance -- 2.5.1 Boxplot -- 2.5.2 Remove Outlier -- 2.5.3 Remove NA -- 2.5.4 Feature Importance -- Exercises -- References -- 3 Classification -- 3.1 Logistic Regression -- 3.2 Decision Tree and Random Forest -- 3.3 Neural Network -- 3.4 Support Vector Machines -- 3.4.1 Important Hyperparameters -- 3.5 Naive Bayes -- 3.6 Improving Classification Performance -- Exercises -- References -- 4 Clustering -- 4.1 Introduction to Clustering -- 4.2 K-means -- 4.3 The Elbow Method -- Exercises -- References -- 5 Time Series -- 5.1 Introduction to Time Series -- 5.2 Stationarity -- 5.3 Level, Trend, and Seasonality -- 5.4 Exponential Smoothing -- 5.4.1 Simple Exponential Smoothing -- 5.4.2 Double Exponential Smoothing (Holt's Exponential Smoothing) -- 5.4.3 Triple Exponential Smoothing (Holt-Winters Exponential Smoothing) -- 5.5 Moving Average Smoothing -- 5.6 Autoregression -- 5.7 Moving Average Process -- 5.8 SARIMA -- 5.9 ARCH/GARCH -- Exercises -- References -- 6 Convolutional Neural Networks -- 6.1 The Convolution Operation -- 6.2 Pooling -- 6.3 Flattening -- 6.4 Building a CNN -- 6.5 CNN

Architectures -- 6.5.1 VGG16 -- 6.5.2 InceptionNet -- 6.5.3 ResNet -- 6.6 Finetuning -- 6.7 Other Tasks That Use CNNs -- 6.7.1 Object Detection -- 6.7.2 Semantic Segmentation -- Exercises -- References -- 7 Text Mining -- 7.1 Preparing the Data -- 7.2 Texts for Classification -- 7.3 Vectorize -- 7.4 TF-IDF -- 7.5 Web Scraping.
7.6 Tokenization -- 7.7 Part of Speech Tagging -- 7.8 Stemming and Lemmatization -- Exercises -- Reference -- 8 Chatbot, Speech, and NLP -- 8.1 Speech to Text -- 8.2 Preparing the Data for Chatbot -- 8.2.1 Download the Data -- 8.2.2 Reading the Data from the Files -- 8.2.3 Preparing Data for Seq2Seq Model -- 8.3 Defining the Encoder-Decoder Model -- 8.4 Training the Model -- 8.5 Defining Inference Models -- 8.6 Talking with Our Chatbot -- Exercises -- References -- Part II Applications of Artificial Intelligence in Business Management -- 9 AI in Human Resource Management -- 9.1 Introduction to Human Resource Management -- 9.2 Artificial Intelligence in Human Resources -- 9.3 Applications of AI in Human Resources -- 9.3.1 Salary Prediction -- 9.3.2 Recruitment -- 9.3.3 Course Recommendation -- 9.3.4 Employee Attrition Prediction -- Exercises -- References -- 10 AI in Sales -- 10.1 Introduction to Sales -- 10.1.1 The Sales Cycle -- 10.2 Artificial Intelligence in Sales -- 10.3 Applications of AI in Sales -- 10.3.1 Lead Scoring -- 10.3.2 Sales Assistant Chatbot -- 10.3.3 Product Recommender Systems -- 10.3.4 Recommending via Pairwise Correlated Purchases -- Exercises -- References -- 11 AI in Marketing -- 11.1 Introduction to Marketing -- 11.1.1 Sales vs Marketing -- 11.2 Artificial Intelligence in Marketing -- 11.3 Applications of AI in Marketing -- 11.3.1 Customer Segmentation -- 11.3.2 Analyzing Brand Associations -- Exercises -- References -- 12 AI in Supply Chain Management -- 12.1 Introduction to Supply Chain Management -- 12.1.1 Supply Chain Definition -- 12.1.2 Types of Supply Chain Models -- 12.1.3 Bullwhip Effect -- 12.1.4 Causes of Variation in Orders -- 12.1.5 Reducing the Bullwhip Effect -- 12.2 Artificial Intelligence in Supply Chain Management -- 12.3 Applications of AI in Supply Chain Management.
12.3.1 Demand Forecasting with Anomaly Detection -- 12.3.2 Quality Assurance -- 12.3.3 Estimating Delivery Time -- 12.3.4 Delivery Optimization -- Exercises -- References -- 13 AI in Operations Management -- 13.1 Introduction to Operations Management -- 13.1.1 Business Process Management -- 13.1.2 Six Sigma -- 13.1.3 Supply Chain Management (SCM) vs. Operations Management (OM) -- 13.2 Artificial Intelligence in Operations Management -- 13.3 Applications of AI in Operations -- 13.3.1 Root Cause Analysis for IT Operations -- 13.3.2 Predictive Maintenance -- 13.3.3 Process Automation -- Exercises -- References -- 14 AI in Corporate Finance -- 14.1 Introduction to Corporate Finance -- 14.2 Artificial Intelligence in Finance -- 14.3 Applications of AI in Corporate Finance -- 14.3.1 Default Prediction -- 14.3.2 Predicting Credit Card Fraud -- Exercises -- References -- 15 AI in Business Law -- 15.1 Introduction to Business Law -- 15.1.1 Types of Businesses -- 15.1.2 Types of Business Laws -- 15.2 Artificial Intelligence in Business Law -- 15.3 Applications of AI in Business Law -- 15.3.1 Legal Document Summarization -- 15.3.2 Contract Review Assistant -- 15.3.3 Legal Research Assistant -- Exercises -- References -- 16 AI in Business Strategy -- 16.1 Introduction to Business Strategy -- 16.1.1 Types of Business Strategies -- 16.1.2 Business Strategy Frameworks -- 16.1.3 Barriers to Entry -- 16.2 Artificial Intelligence in Business Strategy -- 16.3 Applications of AI in Business Strategy -- 16.3.1 Startup Acquisition -- 16.3.2 Identifying Closest Competitors -- 16.3.3 SWOT Analysis -- Exercises -- References -- Index.