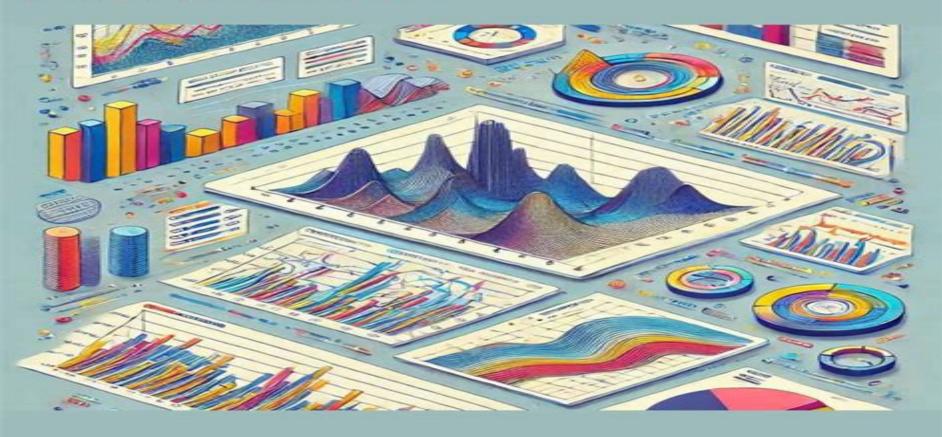
Introducing Data Science

Big Data, Machine Learning, and more, using Python tools



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understanding of using data to solve business problems high school level math and statistics and basic Python coding skills are assumed Written by a recognized data science expert Applied Machine Learning for Data Science Practitioners covers essential topics including Data Science Fundamentals that provide you with an overview of core concepts laying the foundation for understanding ML Data Preparation covers the process of framing ML problems and preparing data and features for modeling ML Problem Solving introduces you to a range of ML algorithms including Regression Classification Ranking Clustering Patterns Time Series and Anomaly Detection Model Optimization explores frameworks decision trees and ensemble methods to enhance performance and guide the selection of the most effective model ML Ethics addresses ethical considerations including fairness accountability transparency and ethics Model Deployment and Monitoring focuses on production deployment performance monitoring and adapting to model drift Artificial Intelligence and Machine Learning in the Travel Industry Ben Vinod, 2023-05-26 Over the past decade Artificial Intelligence has proved invaluable in a range of industry verticals such as automotive and assembly life sciences retail oil and gas and travel The leading sectors adopting AI rapidly are Financial Services Automotive and Assembly High Tech and Telecommunications Travel has been slow in adoption but the opportunity for generating incremental value by leveraging AI to augment traditional analytics driven solutions is extremely high The contributions in this book originally published as a special issue for the Journal of Revenue and Pricing Management showcase the breadth and scope of the technological advances that have the potential to transform the travel experience as well as the individuals who are already putting them into practice **Machine Learning for** Practical Decision Making Christo El Morr, Manar Jammal, Hossam Ali-Hassan, Walid El-Hallak, 2022-11-29 This book provides a hands on introduction to Machine Learning ML from a multidisciplinary perspective that does not require a background in data science or computer science It explains ML using simple language and a straightforward approach guided by real world examples in areas such as health informatics information technology and business analytics The book will help readers understand the various key algorithms major software tools and their applications Moreover through examples from the healthcare and business analytics fields it demonstrates how and when ML can help them make better decisions in their disciplines. The book is chiefly intended for undergraduate and graduate students who are taking an introductory course in machine learning It will also benefit data analysts and anyone interested in learning ML approaches

Smart and Secure Embedded and Mobile Systems Jorge Marx Gómez, Anael Elikana Sam, Devotha Godfrey Nyambo, 2024-06-29 This book gathers a selection of research papers that delve into the field of smart systems covering a wide range of applications in transportation agriculture healthcare energy management and more Emphasizing the fusion of intelligence and security they reveal how advanced embedded and mobile systems are paving the way for a smarter and safer future The book presents peer reviewed research articles from the First International Conference on Embedded and Mobile Systems ICTA EMOS which was held on November 24th 25th 2022 in Arusha Tanzania The book showcases the remarkable

potential of advanced technologies in shaping a smarter and more secure world addressing topics such as transportation and mobility solutions smart manufacturing and agriculture ICT infrastructure and resource management healthcare and energy management system integration and control and solutions for innovation and monitoring **Introduction to Data Science** and Machine Learning Keshav Sud, Pakize Erdogmus, Seifedine Kadry, 2020-03-25 Introduction to Data Science and Machine Learning has been created with the goal to provide beginners seeking to learn about data science data enthusiasts and experienced data professionals with a deep understanding of data science application development using open source programming from start to finish This book is divided into four sections the first section contains an introduction to the book the second covers the field of data science software development and open source based embedded hardware the third section covers algorithms that are the decision engines for data science applications and the final section brings together the concepts shared in the first three sections and provides several examples of data science applications Language Processing in Action, Second Edition Hobson Lane, Maria Dyshel, 2025-02-25 Develop your NLP skills from scratch with an open source toolbox of Python packages Transformers Hugging Face vector databases and your own Large Language Models Natural Language Processing in Action Second Edition has helped thousands of data scientists build machines that understand human language In this new and revised edition you ll discover state of the art Natural Language Processing NLP models like BERT and HuggingFace transformers popular open source frameworks for chatbots and more You ll create NLP tools that can detect fake news filter spam deliver exceptional search results and even build truthfulness and reasoning into Large Language Models LLMs In Natural Language Processing in Action Second Edition you will learn how to Process analyze understand and generate natural language text Build production quality NLP pipelines with spaCy Build neural networks for NLP using Pytorch BERT and GPT transformers for English composition writing code and even organizing your thoughts Create chatbots and other conversational AI agents In this new and revised edition you ll discover state of the art NLP models like BERT and HuggingFace transformers popular open source frameworks for chatbots and more Plus you ll discover vital skills and techniques for optimizing LLMs including conversational design and automating the trial and error of LLM interactions for effective and accurate results About the technology From nearly human chatbots to ultra personalized business reports to AI generated email news stories and novels natural language processing NLP has never been more powerful Groundbreaking advances in deep learning have made high quality open source models and powerful NLP tools like spaCy and PyTorch widely available and ready for production applications This book is your entrance ticket and backstage pass into the next generation of natural language processing About the book Natural Language Processing in Action Second Edition introduces the foundational technologies and state of the art tools you ll need to write and publish NLP applications You learn how to create custom models for search translation writing assistants and more without relying on big commercial foundation models This fully updated second edition includes coverage of BERT Hugging

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