Machine learning with python coursera github

The central class is supported by students. When you buy links on our website, we can earn an affiliate fee. University of Illinois at Urbana-Champaign via Coursera 80 Write a Review of Machine Learning Courses Courses Python Courses This course, Machine Learning for Accounting with Python, introduces machine learning algorithms (models) and their applications in accounting problems. It covers classification, regression, clustering, text analysis, time series analysis. It also discusses model evaluation and model optimization. This course provides an entry point for students to be able to apply appropriate machine learning models to business data sets with Python to solve various problems. Accounting analytics with Python is a prerequisite for this course. This course runs on the same platform (Jupyter Notebook) as the pre-course. While the accounting data analytics using Python covers data understanding and data preparation in the data analysis process, this course covers the next two phases in the process, modeling and evaluating the model. At the end of two courses, students should be able to complete the entire data analysis process with Python. In this module, you'll be introduced to the course, your teacher and classmates, and our learning environment. This orientation will also help you gain the technical skills you need to navigate and be successful in this course. MODULE 1: INTRODUCTION TO MACHINE LEARNING - This module provides the basis for the rest of the course, presenting the basic concepts behind machine learning, and in particular how to perform machine learning with Python and the scikit-learn machine learning module. First, you'll learn about the basic types of machine learning. Next, you'll learn an important step before using machine learning algorithms, pre-processing data. Finally, you'll learn how to use different types of machine learning algorithms in the Python script. MODULE 2: FUNDAMENTAL ALGORITHMS I -This module presents three machine learning algorithms. First, you'll learn how linear regression can be considered a machine learning problem with parameters that need to be defined computationally, minimizing cost function. Here's a logistical regression. Despite its name, Logistic Regression is a classification algorithm. Finally, you will learn the Decision Tree, which is a popular machine learning algorithm that can be used for both classification and regression. This module will delve into the concept of machine classification, where algorithms learn from existing, tagged data to classify new, invisible data by specific categories; and the concept of regression machine where algorithms study a model of data to forecasts for new, invisible continuous data. While all these algorithms are algorithms in their mathematical frameworks they are often used to classify numerical, text and image data or perform regression in various fields. MODULE 3: Fundamental Algorithms II -This module introduces three more machine learning algorithms, k-nearest neighbors, a vector support machine and a random forest. All of them can be used to classify or regress tasks. MODULE 4: MODEL EVALUATION -Model Evaluation is an integral component of any data analysis project. This helps to find out how well the model will work on predicting future (outside of sample) data. This module presents the basic metrics of model evaluation for machine learning algorithms. First, the regression assessment indicators are presented. Then you introduce metrics and techniques to evaluate classification. MODULE 5: MODEL OPTIMIZATION - This module presents model optimization methods. First, the basic methods of choosing functions are presented. Then a cross-checking technique is introduced that can provide a more accurate assessment of the models. Finally, a model, or hyperparameter tunnel, is introduced, which uses cross-checking. MODULE 6: INTRODUCTION TO TEXT ANALYSIS - In this module, you'll start applying your new machine learning skills to an exciting data analytics theme: Text Analysis. First, we'll look at the process by which text data is converted into numerical data that can be processed by a computer. At the same time, a number of new concepts that focus on manipulating this data to create improved machine learning predictions. Secondly, we will apply machine learning algorithms, in particular classification, to text data. Finally, we will examine more advanced concepts in textual analysis and introduce a special type of text classification: mood analysis. MODULE 7: INTRODUCTOIN TO CLUSTERING -This module introduces clustering where data points are assigned to subgroups of points based on certain specific properties, such as spatial distance or location density of points. В то время как люди часто находят кластеры визуально с легкостью в данных наборах данных, вычислительно проблема является более сложной. This module begins by exploring the basic ideas behind this uncontrolled learning technique. One of the most popular methods of clustering, K-means, is introduced. Here's an example of K-means. Finally, DB-SCAN technology is introduced based on density. MODULE 8: INTRODUCTION TO TIME SERIES DATA - This module introduces time and date data that provide unique learning opportunities and challenges. First, we'll discuss how to properly handle the time and date of python's functions. Next, we will expand this discussion to process data, index by time and date of the information, which is known as time-series data. 0.0 rating, 0 Reviews Start Your Accounting Machine Learning Review with Python Python The central class is supported by students. When you buy links on our website, we can earn an affiliate fee. University of Michigan through Coursera 245 Write a review of Python Courses Programming Languages Courses This course introduces the basics of Python 3, including conditional execution and iteration as management structures, as well as lines and lists as data structures. You will program on the screen Turtle draw beautiful pictures. You'll also learn how to draw reference charts as a way to talk about running programs, which will help you create your debugging skills. The course has no preconditions. It will cover Chapter 1-9 of the Python Programming Basics textbook, which is the accompanying text (optional and free) for this course. The course is designed for you if you're new to Python programming, if you need to retrain on the basics of Python, or if you may have had some exposure to Python programming, but want a deeper exposure and vocabulary to describe and talk about programs. This is the first of five courses in Python 3 programming. General Introduction - In the first week you will be introduced to programming in a python through lectures and a Runestone tutorial - an interactive online tutorial built for this course. By the end of the module, you'll run your first python program and teach images by writing the program. Sequences and iterations - In the second week you'll use the Runestone lecture and tutorial to understand the basics of several types of python data - lists, strings, tuples - and management structure - for loops. By the end of this week, you'll be able to write more complex programs that create drawings by incorporating for cycles. Finally, we bring you the basics of the accumulation pattern, which will expand each week until the end of the course. Booleans and Conditionals - In the third week you will learn a new type of python data - boolean - as well as another management structure - conditional execution. With video lectures and the Runestone tutorial, you'll learn what binary, unitary, nesting, and chain conditions are, as well as how to incorporate conditional conditions into the accumulation pattern. A sequence of mutations and accumulation patterns -Next week we will present a deeper knowledge about the use of lists, lines and python objects in general. We'll also cover how to use the accumulation pattern with lists and lines. The final task will test your knowledge and skills through application, just as previous scores and assignments have done, albeit with a more complex set of tasks now that you have learned the basics. 0.0 Ranking Based on 0 Reviews Start Your Review python Basics Get Personalized Course Recommendations, Track Subjects and Courses With Reminders, and More. Sign up for the free University of Michigan via Coursera 35.7k Review Database Courses Python Courses This course will introduce students to the basics of structured query language (S'L), as well as basic database design for data storage as part of multi-stage data collection, analysis and processing efforts. The course will use S'Lite3 as its database. We will also create web scanners and multi-stage data collection and visualization processes. We will use the D3.js library to visualize the main data. This course will cover chapters 14-15 of Python books for all. To succeed in this course, you must be familiar with the material covered in chapters 1-13 textbook and the first three courses in this specialty. This course covers Python 3. Object-oriented Python - To start this class, we cover the foundations of the object-oriented Python. We won't write our own objects, but since many of the things we use like BeautifulSoup, strings, dictionaries, database connections all use object-oriented (OO) models we need to at least understand some of its patterns and terminology. Basic Structured Query Language - We learn the four main CRUD operations (Creating, Reading, Update, and Delete) to manage the data stored in the database. Data Models and Relational S'L -In this section, we learn about how data is stored in multiple tables in the database and how the lines are connected (i.e. we establish relationships) in the database. Many-to-many relationships in S'L -In this section we explore how to simulate situations such as students studying in courses where each course has many students and each student is enrolled in many courses. Databases and Visualizations - In this section, we put it all together, get and process some data, and then use the Google Maps API to visualize our data. 4.7 rating based on 2,578 reviews showing Grade Central Grade Sorting Class Class Latest Highest and Lowest Rating Lowest to Highest Rating Start Your Review of Database Usage with Python Python machine learning with python coursera github quiz. machine learning with python coursera github solutions. machine learning with python coursera github final project. machine learning with python ibm coursera github quiz answers. machine learning with python ibm coursera github week 4