Weekly progress report

UPSKILL CAMPUS WEEKLY REPORT

BASED ON INTERNSHIP IN DATA SCIENCE AND MACHINE LEARNING REPORT

* In this weekly progress report I am sharing about what are the things I have learnt so far based on data science and machine learning from the given videos

INDUSTRIAL INTERNSHIP PROGRAM

* In this industrial internship program was explained by **“Kaushlendra Singh Sisodia”**  . He has explained about the internship, and the important role of the internship in a students life.
* This is uniconverge technology pvt.Ltd.company is conducting this internship based on their skills.

WEEKLY PROGRESS : WEEK – 4

* In this week I have learnt about the data science and how it is categorized and the Linear algebra is a very important component of data science. Data representation is a crucial part of data science for better understanding. Linear algebra is the foundation of all the reliable machine learning techniques to which we have become used. Read to know more about linear functions and their scope in data science.
* Data science is an interdisciplinary field that analyses massive volumes of data using algorithms, procedures, and processes. It is to find hidden patterns, produce insights, and guide decision-making.
* Calculate the x-value variations.  
  •  Calculate the y-value differences.  
  •  Verify that there is a steady relationship between the difference in y values and the difference in x values. Linear algebra is one of the fundamental fields of mathematics. The study of vectors and linear functions is the main goal of linear algebra. Nowadays, linear algebra is viewed as a fundamental concept in the way that geometry is taught.

The optimization techniques in machine learning. achine learning is the process of employing an algorithm to learn from past data and generalize it to make predictions about future data.

An approximate function that converts input examples into output examples can be used to describe this issue.

* Function Optimization: Finding the collection of inputs that results in the minimum or maximum of the objective function is known as function optimization.
* Approximation of Functions: Generalizing from specific examples to a reusable mapping function for making predictions on new examples.
* Optimizing functions is often easier than approximating functions. Exponential averaging is used by techniques like AdaDelta, RMSProp, and Adam to deliver effective updates and streamline the computation.

Thanking you