A SEMINAR REPORT

on

The Data Science Course 2022: Complete Data Science Bootcamp

Submitted in partial fulfillment of the requirement for the award of Degree of Bachelor of Technology in **COMPUTER SCIENCE AND ENGINEERING**

गुरु घासीदास विश्वविद्यालय, बिलासपुर

Guru Ghasidas Vishwavidyalaya, Bilaspur

A Central University established by the Central University Act 2009 No. 25 of 2009

Session: 2022-23

Submitted By

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B. Tech CSE VII Semester

udemy

Certificate no: UC-45d8345e-99e3-4b01-aae5-ad4a6abbb7ac
Certificate url: ude.my/UC-45d8345e-99e3-4b01-aae5-ad4a6abbb7ac
Reference Number: 0004

CERTIFICATE OF COMPLETION

The Data Science Course 2022: Complete Data Science Bootcamp

Instructors **365 Careers, 365 Careers Team**

Yuvraj Singh

Date **May 4, 2022**
Length **30 total hours**

Python for Data Science

Python is an interpreted high-level programming language for general-purpose programming. Created by Guido van Rossum and first released in 1991, Python has a design philosophy that emphasizes code readability, notably using significant whitespace. It provides constructs that enable clear programming on both small and large scales. In July 2018, Van Rossum stepped down as the leader in the language community after 30 years. Python features a dynamic type system and automatic memory management. It supports multiple programming paradigms, including object-oriented, imperative, functional and procedural, and has a large and comprehensive standard library.

Python interpreters are available for many operating systems. CPython, the reference implementation of Python, is open-source software and has a community-based development model, as do nearly all of Python's other implementations. Python and CPython are managed by the non-profit Python Software Foundation.

Python has a simple, easy to learn syntax emphasizes readability hence, it reduces the cost of program maintenance. Also, Python supports modules and packages, which encourages program modularity and code reuse.

Advantages of using PYTHON

The diverse application of the Python language is a result of the combination of features which give this language an edge over others. Some of the benefits of programming in Python include:

1. Presence of Third-Party Modules:

The Python Package Index (PPI) contains numerous third-party modules that make Python capable of interacting with most of the other languages and platforms.

2. Extensive Support Libraries:

Python provides a large standard library which includes areas like internet protocols, string operations, web services tools and operating system interfaces. Many high use programming tasks have already been scripted into the standard library which reduces the length of code to be written significantly.

3. Open Source and Community Development:

Python language is developed under an OSI-approved open-source license, which makes it free to use and distribute, including for commercial purposes. Further, its development is driven by the community which collaborates for its code through hosting conferences and mailing lists, and provides for its numerous modules.