Certified Professional Data Scientist (CPDS)

Syllabus: CPDS-3.11

Introduction

The Certified Professional Data Scientist Exam (CPDS) is a premier certification meticulously designed for professionals endeavouring to affirm and exhibit their profound expertise in data science, scrutinizing candidates on a broad spectrum of advanced data science concepts and practical applications within this multidisciplinary field.

Exam Syllabus

Module 1: Advanced Statistical Analysis:

- Mastery in employing statistical theories and methods to analyse, interpret, and visualize data for informed decision-making.
- Proficient application of hypothesis testing, regression analysis, and other statistical techniques in addressing real-world data problems.

Module 2: Machine Learning and Predictive Modeling:

- Proficiency in designing, training, evaluating, and deploying machine learning models to solve complex business problems.
- Comprehensive understanding of supervised, unsupervised, and deep learning learning paradigms, alongside various machine learning algorithms and their practical applications.

Module 3: Big Data Technologies:

- Proficient handling and analysis of big data using cutting-edge technologies like Hadoop, Spark, and other distributed computing environments.
- Experience with big data storage systems, and advanced querying techniques using SQL and NoSQL databases.

Module 4: Data Wrangling and Pre-processing:

- Advanced skills in data cleansing, transformation, and pre-processing to prepare datasets for analysis and machine learning tasks.
- Proficiency in using various data wrangling tools and libraries for effective data pre-processing and feature engineering.

Module 5: Natural Language Processing and Computer Vision:

- Practical expertise in implementing NLP and computer vision techniques to extract insights from unstructured data.
- Experience with deep learning frameworks and modern architectures for NLP and computer vision tasks.

Module 6: Data Visualization and Communication:

- Mastery in creating intuitive, interactive, and insightful visualizations to convey complex data insights to non-technical stakeholders.
- Effective communication of data-driven findings and recommendations through compelling storytelling and visualization techniques.