



Machine Learning and Data Science







WHY CHOOSE THIS TRAINING COURSE?

This machine learning and data science course is highly regarded for several reasons. Firstly, it allows participants to grasp the fundamental concepts and techniques in machine learning and data science. Through theoretical content and case studies, participants become familiar with important algorithms, methods, and tools in this field.

Secondly, this course is suitable for individuals interested in machine learning and data science and seeking to strengthen their skills in this area. It caters to students, researchers, industry professionals, and anyone looking for an opportunity to enhance their knowledge in machine learning and data science.

WHO IS THIS TRAINING COURSE FOR?

Some common prerequisites for enrolling in this course include the following:

- Mathematics Fundamentals: A solid understanding of basic mathematics, mathematical operations, calculus, and statis tics can help participants grasp the concepts and algorithms of machine learning.
- Programming: Familiarity with a programming language such as Python or R can assist participants in implementing machine learning algorithms, performing data analysis, and working with data.
- Statistical Concepts: Knowledge of fundamental statistical concepts such as distributions, probability theory, hypothe sis testing, and statistical analysis aids participants in under standing machine learning methods and interpreting results.

WHAT ARE THE GOALS?

The primary goal of this training course is to provide comprehensive and practical education in the field of machine learning and data science. Through this course, participants will be able to:

- Gain a deeper understanding of the principles and concepts of machine learning and data science.
- Master important algorithms and methods in the field of machine learning and data science.
- Acquire the ability to use tools and programming languages commonly employed in this domain.
- Solve real-world problems using machine learning techniques.



Ali Amirinejhad

- Bachelor's degree in Computer Engineering.
- Final year graduate student in Artificial Intelligence.
- 1-year work experience at Datal Company.
- Teaching experience at Nargan Academy.



Sina Moradi

- NCS Group Apr 2022 current
- Deloitte Senior Analytics Consultant -Aug 2021 – Apr 2022
- GHD Digital Data Scientist Dec 2020 Aug 2021
- Sydney Water Project Manager Data Scientist - Dec 2018 - Dec 2020
- SA Water Junior Data Scientist Jan 2016 - Dec 2017

THE COURSE CONTENT (24 HOURS)

- Introduction to Python programming language and libraries like Pandas and NumPy.
- Data visualization and data preparation.
- Basics of machine learning and the scikit-learn library.
- Linear and non-linear regression algorithms.
- Classification algorithms: SVM, Naive Bayes, etc.
- Decision tree algorithms.
- Unsupervised learning and dimensionality reduction methods.
- Deep learning, neural networks, image processing, and text processing.