PetroSkills

Introduction to Data-Driven Workflows

MODULE

About the Skill Module

This module introduces data-driven modeling, including its connection to machine learning. We will examine the rising applications of machine learning in different sectors of the economy and how this impacts daily life. Learners will then see how the principles and effects of machine learning are transforming work in the oilfield, focusing on the various applications of data-driven modeling and where this can make operations more efficient and profitable.

Target Audience

Geoscientists, petrophysicists, engineers, or anyone interested in subsurface engineering and geoscience applications of machine learning and data analytics.

You Will Learn

You will learn how to:

- Define and describe machine learning

- Discuss the adoption of machine learning and data-driven modeling in our industry, including potential strengths and obstacles
- Identify the modes of machine learning and what distinguishes each
- Recognize the main forms of supervised learning
- Conceptualize applications of supervised learning
- Describe unsupervised learning and what distinguishes it from supervised learning
- Conceptualize applications of unsupervised learning
- Identify different data types
- Recognize sampling methods and their pitfalls
- Be able to interpret various measures of univariate statistics
  - Measures of central tendency
  - Measures of spread
  - Visual representations of data
  - Handling of outliers

Product Details

Categories: Upstream

Disciplines: Data Management, Science and Analytics

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 3 hours (approx.)

$395.00