



# Fundamentos de Machine Learning para Geometalurgia Numpy

### **Agenda**

# Machine Learning basis













**Univariate Exploratory Data Analysis (EDA)** 

**Data Preparation** 

Regression model (proxy) for geometallurgical parameter Ai



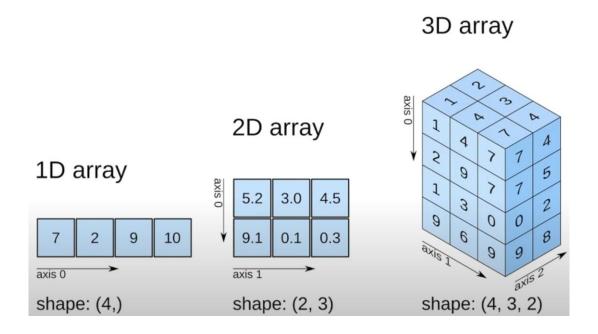
#### **Numpy**

NumPy (**Num**erical **Py**thon) is a library for Python, adding support for large, multi-dimensional arrays and matrices, along with a large collection of high-level mathematical functions to operate on these arrays.

Numpy is the universal standard for working with numerical data in Python and is used in almost every field of science and engineering.

# **Array**

Central data structure of the NumPy library. An array is a grid of values and it contains information about the raw data, how to locate an element, and how to interpret an element.



#### **Array**

NumPy arrays are faster and uses much less memory to store data than Python lists. While a Python list can contain different data types within a single list, all of the elements in a NumPy array should be homogeneous.





# **NumPy official documentation**

https://www.numpy.org/

