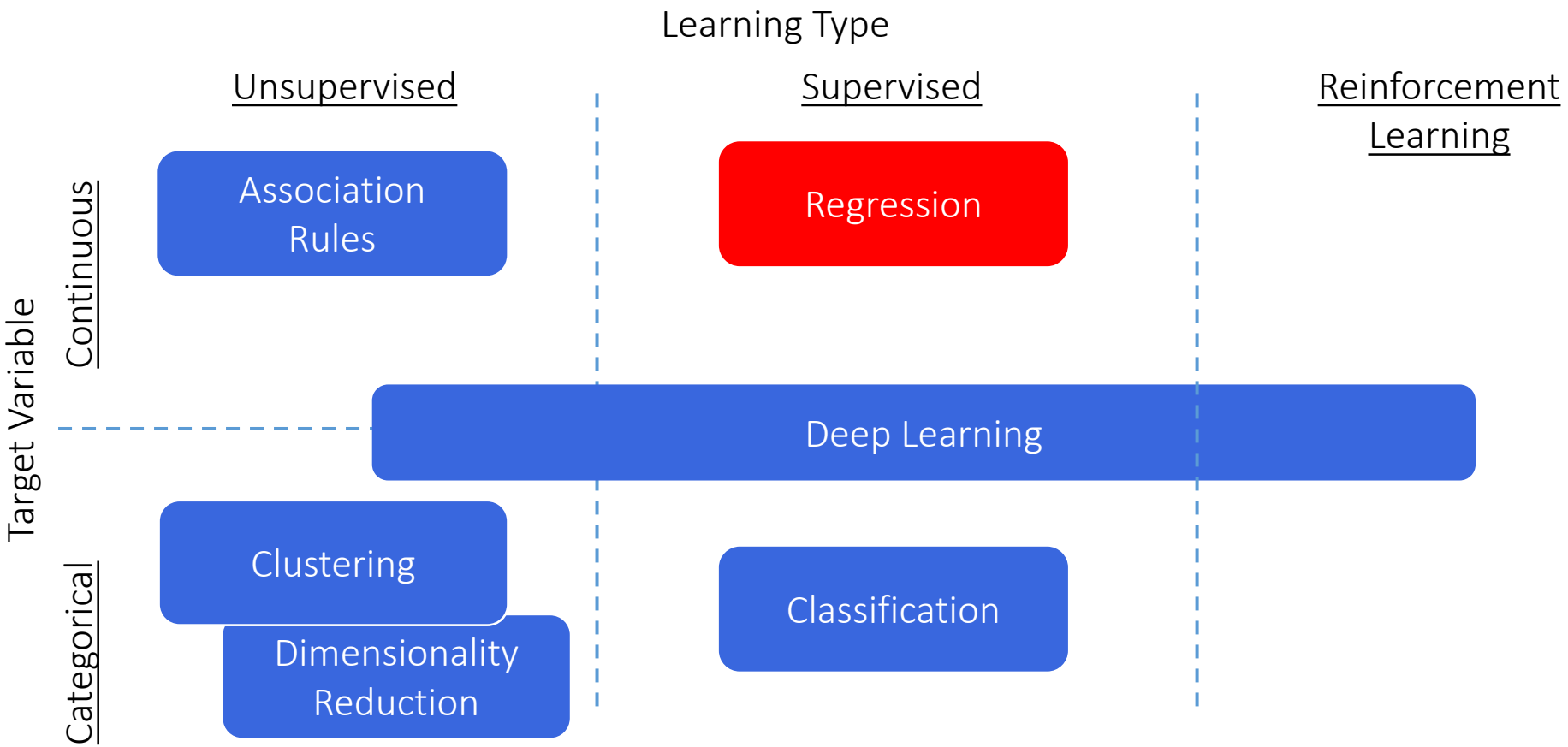
Regression Types 101

Regression Types

Machine Learning Types

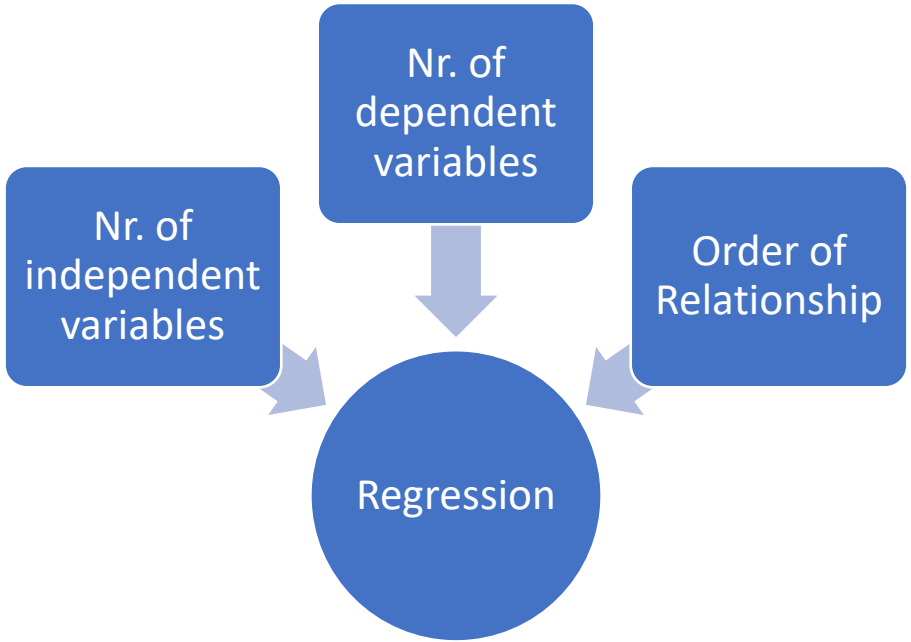


Regression Types

Overview

- Univariate
- Multivariate

- Single-target
- Multi-target



- Linear
- Quadratic
- Polynomial
- …

Regression Types

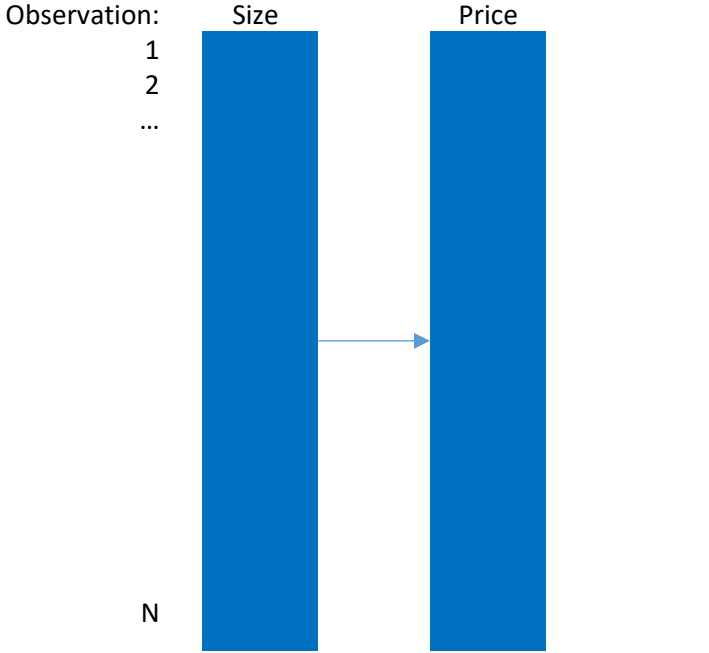
Univariate Linear Regression

Univariate Linear Regression

- One independent variable
- One dependent variable
- Linear relationship

1 independent variable

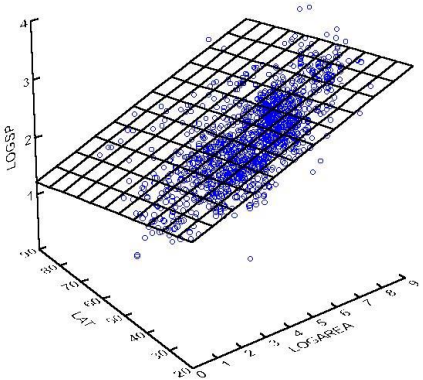
1 dependent variable (target)

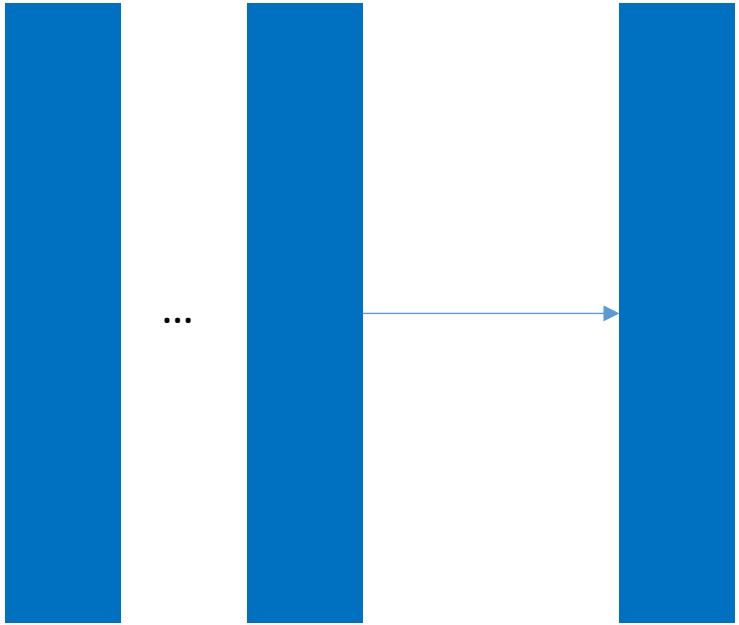


Regression Types

Multivariate Linear Regression

- Multivariate Linear Regression
- More than one independent variables
- One dependent variable
- Linear relationship



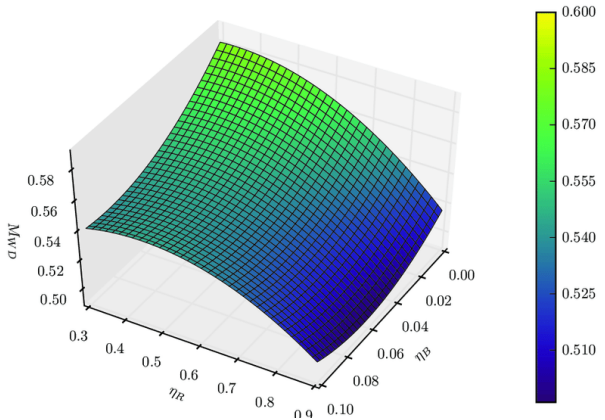


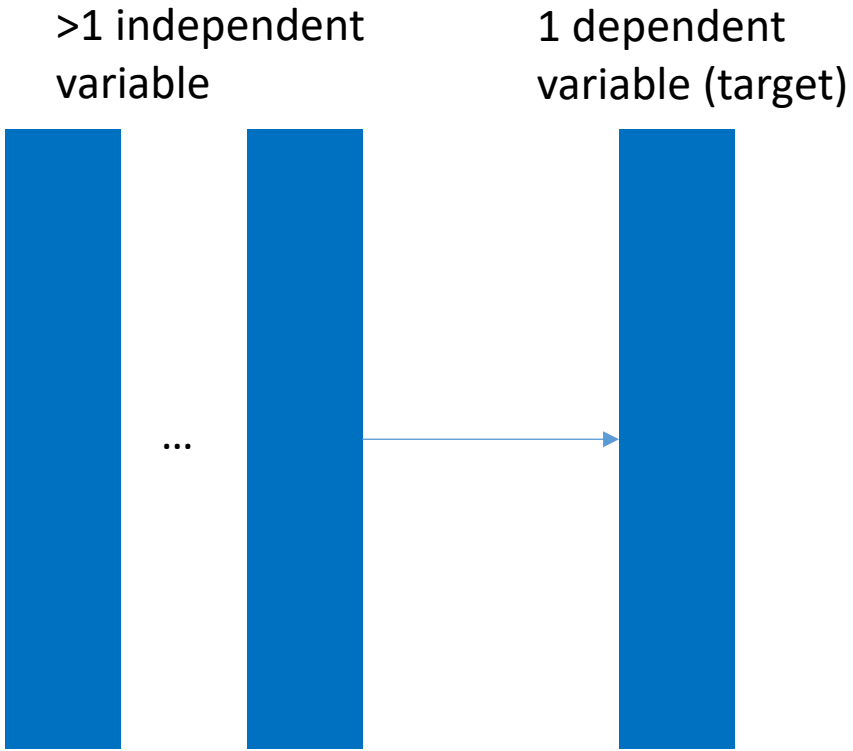
Source: http://www.anovisions.com/types_of_data_analysis.html

Regression Types

Multivariate Higher-Order Regression

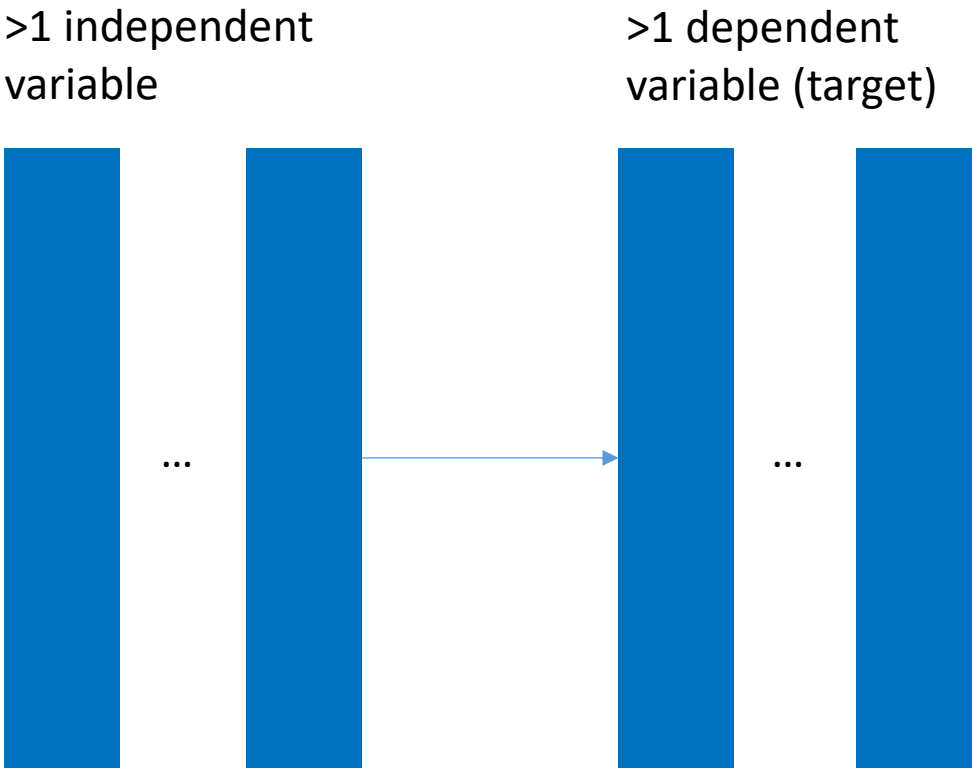
- More than one independent variables
- One dependent variable
- Quadratic or some other higher-order relationship





Source: https://www.researchgate.net/figure/Surface-plot-of-the-multivariate-quadratic-regression-fit-Note-that-the-maximum-and_fig3_325517988

Regression Types

Multiple Target Regression

- More than one independent variables
- More than one dependent variable
- Can be implemented with Deep Learning