

Bank Marketing Dataset

<https://archive.ics.uci.edu/ml/datasets/Bank+Marketing#>

Abstract

- The data is related with direct marketing campaigns of a Portuguese banking institution.
- The marketing campaigns were based on phone calls.
- Often, more than one contact to the same client was required, in order to access if the product (bank term deposit) would be ('yes') or not ('no') subscribed.

Bank Marketing		
Donated on 2/13/2012		
The data is related with direct marketing campaigns (phone calls) of a Portuguese banking institution. The classification goal is to predict if the client will subscribe a term deposit (variable y).		
Dataset Characteristics	Subject Area	Associated Tasks
Multivariate	Business	Classification
Attribute Type	# Instances	# Attributes
Real	45211	17

Dataset Information

We use first data to do analysis.

Index	Dataset	Information
1	bank-additional-full.csv	1) all examples (41188) and 20 inputs 2) ordered by date (from May 2008 to November 2010)
2	bank-additional.csv	10% of the examples (4119), randomly selected from 1)
3	bank-full.csv	all examples and 17 inputs (older version of this dataset with less inputs)
4	bank.csv	10% of the examples and 17 inputs, randomly selected from 3 (older version of this dataset with less inputs)

Attributes

# Bank client					
Variables	Type	Information	Variables	Type	Information
age	Numeric	17 - 98	default	Category	Has credit in default?
job	Category	Types of job	housing	Category	Has housing Loan?
marital	Category	Marital status	loan	Category	Has personal loan?
education	Category	Education Level			

Attributes

Related with the last contact of the current campaign

Variables	Type	Information
contact	Category	Contact communication type
month	Category	Last contact month of year
day_of_week	Category	Last contact day of the week
duration	Numeric	Last contact duration, in seconds.

Attributes

# Other attributes		
Variables	Type	Information
campaign	Numeric	Number of contacts performed during this campaign and for this client
pdays	Numeric	Number of days that passed by after the client was last contacted from a previous campaign
previous	Numeric	Number of contacts performed before this campaign and for this client
poutcome	Category	Outcome of the previous marketing campaign

Attributes

Social and economic context attributes

Variables	Type	Information
emp.var.rate	Numeric	Employment variation rate - quarterly indicator
cons.price.idx	Numeric	Consumer price index - monthly indicator
cons.conf.idx	Numeric	Consumer confidence index - monthly indicator
euribor3m	Numeric	Euribor 3 month rate - daily indicator
nr.employed	Numeric	Number of employees - quarterly indicator

Attributes

Output variable (desired target)

Variables	Type	Information
Y	Binary	Has the client subscribed a term deposit?
