

The data set (and description) can be downloaded here:

<http://archive.ics.uci.edu/ml/machine-learning-databases/blood-transfusion/transfusion.data>

Description:

Title: Blood Transfusion Service Center Data Set

Abstract: Data taken from the Blood Transfusion Service Center in Hsin-Chu City in Taiwan -- this is a classification problem.

Data Set Characteristics: Multivariate
Number of Instances: 748
Area: Business
Attribute Characteristics: Real
Number of Attributes: 5
Date Donated: 2008-10-03
Associated Tasks: Classification
Missing Values? N/A

Source:

Original Owner and Donor
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Date Donated: October 3, 2008

Data Set Information:

To demonstrate the RFMTC marketing model (a modified version of RFM), this study adopted the donor database of Blood Transfusion Service Center in Hsin-Chu City in Taiwan. The center passes their blood transfusion service bus to one university in Hsin-Chu City to gather blood donated about every three months. To build a RFMTC model, we selected 748 donors at random from the donor database. These 748 donor data, each one included R (Recency - months since last donation), F (Frequency - total number of donation), M (Monetary - total blood donated in c.c.), T (Time - months since first donation), and a binary variable representing whether he/she donated blood in March 2007 (1 stand for donating blood; 0 stands for not donating blood).

Attribute Information:

Given is the variable name, variable type, the measurement unit and a brief description. The "Blood Transfusion Service Center" is a classification problem. The order of this listing corresponds to the order of numerals along the rows of the database.

R (Recency - months since last donation),
F (Frequency - total number of donation),
M (Monetary - total blood donated in c.c.),
T (Time - months since first donation), and
a binary variable representing whether he/she donated blood in March 2007 (1 stand for donating blood; 0 stands for not donating blood).

Table 1 shows the descriptive statistics of the data. We selected 500 data at random as the training set, and the rest 248 as the testing set.

Table 1. Descriptive statistics of the data

Variable	Data Type	Measurement	Description	min	max	mean	std
Recency	quantitative	Months	Input	0.03	74.4	9.74	8.07
Frequency	quantitative	Times	Input	1	50	5.51	5.84
Monetary	quantitative	c.c. blood	Input	250	12500	1378.68	1459.83
Time	quantitative	Months	Input	2.27	98.3	34.42	24.32
whether donated in March 2007	binary	1=yes 0=no	Output	0	1	1 (24%)	0 (76%)

Citation Request:

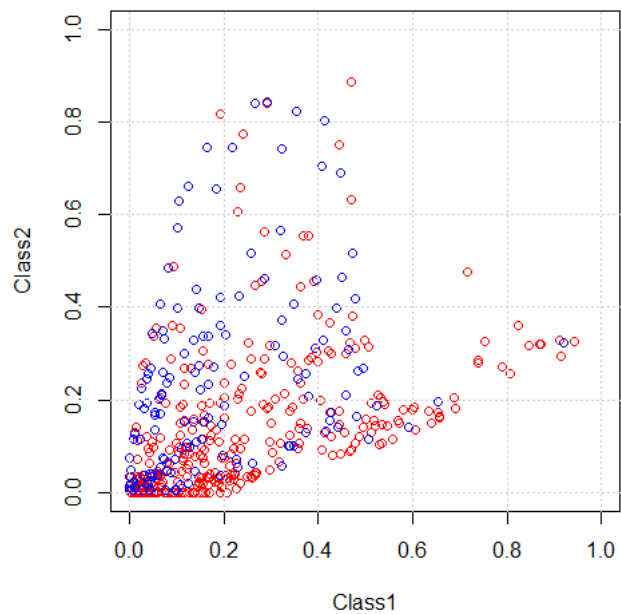
NOTE: Reuse of this database is unlimited with retention of copyright notice for Prof. I-Cheng Yeh and the following published paper:

Yeh, I-Cheng, Yang, King-Jang, and Ting, Tao-Ming, "Knowledge discovery on RFM model using Bernoulli sequence," *Expert Systems with Applications*, 2008 (doi:10.1016/j.eswa.2008.07.018).

Please refer to the repository <http://archive.ics.uci.edu/ml> (see citation policy).

See also Frank, A. & Asuncion, A. (2010). UCI Machine Learning Repository [<http://archive.ics.uci.edu/ml>]. Irvine, CA: University of California, School of Information and Computer Science.

DD-Plot (zonoid): blood-transfusion



DD-Plot (random Tukey): blood-transfusion

