Steel Plates Faults Data Set

Download: Data Folder, Data Set Description

Abstract: A dataset of steel plates' faults, classified into 7 different types. The goal was to train machine learning for automatic pattern recognition.

Data Set Characteristics:	Multivariate	**Number of Instances:**	1941	**Area:**	Physical
Attribute Characteristics:	Integer, Real	**Number of Attributes:**	27	**Date Donated**	2010-10-26
Associated Tasks:	Classification	**Missing Values?**	N/A	**Number of Web Hits:**	15724

Source:

Semeion, Research Center of Sciences of Communication, Via Sersale 117, 00128, Rome, Italy.
www.semeion.it

Data Set Information:

Type of dependent variables (7 Types of Steel Plates Faults):
1.Pastry
2.Z_Scratch
3.K_Scatch
4.Stains
5.Dirtiness
6.Bumps
7.Other_Faults

Attribute Information:

27 independent variables:
X_Minimum
X_Maximum

Y_Minimum
Y_Maximum
Pixels_Areas
X_Perimeter
Y_Perimeter
Sum_of_Luminosity
Minimum_of_Luminosity
Maximum_of_Luminosity
Length_of_Conveyer
TypeOfSteel_A300
TypeOfSteel_A400
Steel_Plate_Thickness
Edges_Index
Empty_Index
Square_Index
Outside_X_Index
Edges_X_Index
Edges_Y_Index
Outside_Global_Index
LogOfAreas
Log_X_Index
Log_Y_Index
Orientation_Index
Luminosity_Index
SigmoidOfAreas

Relevant Papers:

1.M Buscema, S Terzi, W Tastle, A New Meta-Classifier,in NAFIPS 2010, Toronto (CANADA),26-28 July 2010, 978-1-4244-7858-6/10 ©2010 IEEE
2.M Buscema, MetaNet: The Theory of Independent Judges, in Substance Use & Misuse, 33(2), 439-461,1998

Citation Request:

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