

EVALUATING ACCURACY OF CLASSIFIER

1) LOGISTIC REGRESSION (functions.Logistic)

=== Run information ===

Scheme:weka.classifiers.functions.Logistic -R 1.0E-8 -M -1

Relation: german_credit

Instances: 1000

Attributes: 21

checking_status

duration

credit_history

purpose

credit_amount

savings_status

employment

installment_commitment

personal_status

other_parties

residence_since

property_magnitude

age

other_payment_plans

housing

existing_credits

job

num_dependents

own_telephone

foreign_worker

class

Test mode:10-fold cross-validation

=== Classifier model (full training set) ===

Logistic Regression with ridge parameter of 1.0E-8

Coefficients...

Variable	Class
	good
=====	
checking_status=<0	-0.778
checking_status=0<=X<200	-0.4032
checking_status=>=200	0.1877
checking_status=no checking	0.9338
duration	-0.0279
credit_history=no credits/all paid	-0.8129
credit_history=all paid	-0.9562
credit_history=existing paid	-0.2268
credit_history=delayed previously	0.0403
credit_history=critical/other existing credit	0.6229
purpose=new car	-0.692
purpose=used car	0.9744
purpose=furniture/equipment	0.0996
purpose=radio/tv	0.1996
purpose=domestic appliance	-0.1692
purpose=repairs	-0.4756

purpose=education	-0.7283
purpose=vacation	0
purpose=retraining	1.3674
purpose=business	0.0481
purpose=other	0.7968
credit_amount	-0.0001
savings_status=<100	-0.4402
savings_status=100<=X<500	-0.0825
savings_status=500<=X<1000	-0.0641
savings_status=>=1000	0.8989
savings_status=no known savings	0.5065
employment=unemployed	-0.2934
employment=<1	-0.2265
employment=1<=X<4	-0.1106
employment=4<=X<7	0.5376
employment=>=7	-0.0168
installment_commitment	-0.3301
personal_status=male div/sep	-0.4923
personal_status=female div/dep/mar	-0.2168
personal_status=male single	0.3238
personal_status=male mar/wid	-0.1252
personal_status=female single	0
other_parties=none	-0.1798
other_parties=co applicant	-0.6158
other_parties=guarantor	0.7988
residence_since	-0.0048
property_magnitude=real estate	0.2572

property_magnitude=life insurance	-0.0242
property_magnitude=car	0.0627
property_magnitude=no known property	-0.4732
age	0.0145
other_payment_plans=bank	-0.3273
other_payment_plans=stores	-0.2041
other_payment_plans=none	0.3191
housing=rent	-0.3498
housing=own	0.0939
housing=for free	0.3341
existing_credits	-0.2721
job=unemp/unskilled non res	0.5095
job=unskilled resident	-0.0265
job=skilled	-0.0451
job=high qualif/self emp/mgmt	0.0301
num_dependents	-0.2647
own_telephone	0.3
foreign_worker	1.3922
Intercept	3.1983

Odds Ratios...

Variable	Class
	good
=====	
checking_status=<0	0.4593
checking_status=0<=X<200	0.6682

checking_status=>=200	1.2064
checking_status=no checking	2.5443
duration	0.9725
credit_history=no credits/all paid	0.4436
credit_history=all paid	0.3843
credit_history=existing paid	0.7971
credit_history=delayed previously	1.0411
credit_history=critical/other existing credit	1.8643
purpose=new car	0.5006
purpose=used car	2.6497
purpose=furniture/equipment	1.1047
purpose=radio/tv	1.2209
purpose=domestic appliance	0.8443
purpose=repairs	0.6215
purpose=education	0.4827
purpose=vacation	1
purpose=retraining	3.9251
purpose=business	1.0493
purpose=other	2.2184
credit_amount	0.9999
savings_status=<100	0.6439
savings_status=100<=X<500	0.9208
savings_status=500<=X<1000	0.9379
savings_status=>=1000	2.4569
savings_status=no known savings	1.6594
employment=unemployed	0.7457
employment=<1	0.7973