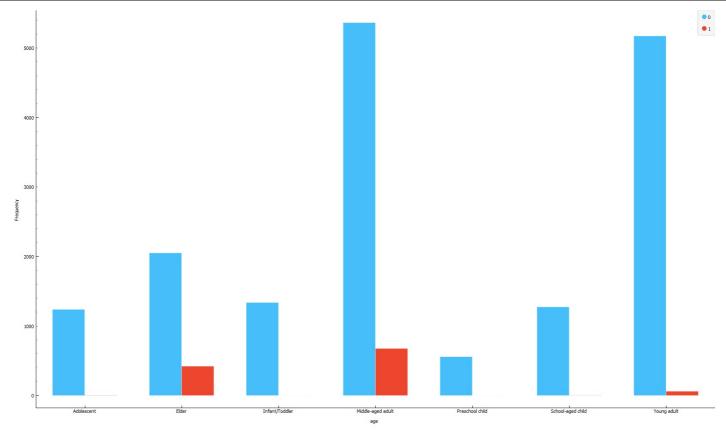
Distributions Tue Jun 19 18, 20:12:53



Distribution of 'age' grouped by 'class'

## Settings

Sampling type: No sampling, test on testing data Target class: Average over classes

## Scores

Method	AUC	CA	F1	Precision	Recall
CN2 rule inducer	0.809	0.929	0.926	0.924	0.929
Naive Bayes	0.849	0.906	0.913	0.923	0.906
Random Forest	0.841	0.936	0.907	0.925	0.936
Tree	0.500	0.936	0.904	0.875	0.936

Tue Jun 19 18, 20:14:04

Tree size: 1 nodes, 1 leaves Edge widths: Fixed Target class: None



**CN2** Rule Viewer Tue Jun 19 18, 20:14:13

## Data domain

C39, C40-C41, C45-C44, C45-C49, C50-C50, C51-C58, C60-C63, C61-C68, C64-C68, C64-C68 G47, G50-G59, G60-G65, G70-G73, G80-G83, G89-G99, H00-H05, H10-H11, H15-H22, H25-H28, H30-H36, H40-H42, H43-H44, H46-H47, H49-H52, H53-H54, H55-H57, H60-H62, H65-H75, H80-H83, H90-H94, H95-H95, I00-I02, I05-I09, I10-I16, I20-I25, I26-I28, I30-I52, I60-I69, I70-I79, I80-I89, I95-I99, J00-J06, J09-J18, J20-J22, J30-J39, J40-J47, J60-J70, J80-J84, J85-J86, J90-J94, J95-J95, J96-J99, K00-K14, ... (total: 243 features) Target: class

Rule ordering: ordered Covering algorithm: exclusive Gamma: 0.7 Evaluation measure: entropy Beam width: 5 Minimum rule coverage: 2 Maximum rule length: 5 Default alpha: 1.0 Parent alpha: 1.0

## Induced rules

	IF conditions		THEN class	Distribution	Probabilities [%]	Quality	Length
121	Q35-Q37≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1
494	K00-K14≠0 AND C50-C50≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
522	age=Adolescent	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1
591 598	S20-S29≠0 AND H10-H11≠0 N60-N65≠0 AND H25-H28≠0	$\rightarrow$	class=1 class=1	[0, 2] [0, 2]	25 : 75 25 : 75	-0.00 -0.00	2
632	Z30-Z39≠0 AND L20-L30≠0	<i>→</i>	class=1	[0, 2]	25 : 75 25 : 75	-0.00	2
695	S90-S99#0 AND H30-H36#0	→	class=1	[0, 2]	25 : 75	-0.00	2
754	age=Young adult AND H53-H54≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
844	age=Young adult AND Z00-Z13≠0 AND N80-N98≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	3
850	age=Young adult AND Z00-Z13≠0 AND R70-R79≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	3
858	H00-H05≠0 AND I20-I25≠0	$\rightarrow$	class=1	[0, 3]	20 : 80	-0.00	2
869	J09-J18#0 AND D37-D48#0	$\rightarrow$	class=1	[0, 3]	20 : 80	-0.00	2
885	H60-H62≠0 AND F30-F39≠0 K00-K14≠0 AND K40-K46≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
916 925	H49-H52≠0 AND T20-T25≠0	$\rightarrow$	class=1 class=1	[0, 2] [0, 2]	25 : 75 25 : 75	-0.00 -0.00	2
933	K00-K14≠0 AND J00-J06≠0	→	class=1	[0, 2]	25 : 75	-0.00	2
936	K00-K14≠0 AND K80-K87≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
946	M15-M19≠0 AND A00-A09≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
960	K00-K14≠0 AND age≠Elder AND G40-G47≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	3
963	J20-J22≠0 AND H10-H11≠0	$\rightarrow$	class=1	[0, 3]	20 : 80	-0.00	2
974	R25-R29≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1
997 1016	\$20-\$29#0 Z00-Z13#0 AND J09-J18#0	$\rightarrow$	class=1 class=1	[0, 3]	20 : 80 25 : 75	-0.00 -0.00	1 2
1025	M15-M19≠0 AND N25-N29≠0	$\rightarrow$	class=1	[0, 2] [0, 2]	25 : 75 25 : 75	-0.00	2
1030	H60-H62≠0 AND G40-G47≠0	→	class=1	[0, 4]	17 : 83	-0.00	2
1035	J09-J18≠0 AND H25-H28≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1043	E20-E35≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1
1052	age=Young adult AND Z00-Z13≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1061	H49-H52≠0 AND M05-M14≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1068	S60-S69≠0 AND N20-N23≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1083 1101	S90-S99≠0 AND I20-I25≠0 H60-H62≠0 AND F40-F48≠0	$\rightarrow$	class=1 class=1	[0, 2]	25 : 75 25 : 75	-0.00 -0.00	2
1101	H60-H62≠0 AND S00-S09≠0	$\rightarrow$	class=1	[0, 2] [0, 2]	25 : 75 25 : 75	-0.00	2
1105	S00-S09#0 AND K70-K77#0	<i>→</i>	class=1	[0, 2]	25 : 75	-0.00	2
1111	H49-H52≠0 AND age≠Elder AND K00-K14≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	3
1115	H49-H52≠0 AND C43-C44≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1127	S00-S09≠0 AND F30-F39≠0	$\rightarrow$	class=1	[0, 3]	20 : 80	-0.00	2
1130	S00-S09≠0 AND M15-M19≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1151	R00-R09≠0 AND H43-H44≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1154 1160	R00-R09≠0 AND H25-H28≠0 H49-H52≠0 AND N20-N23≠0	$\rightarrow$	class=1 class=1	[0, 3] [0, 3]	20 : 80 20 : 80	-0.00 -0.00	2
1164	D10-D36≠0 AND I70-I79≠0	$\rightarrow$	class=1	[0, 3]	25 : 75	-0.00	2
1167	D10-D36≠0 AND M20-M25≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1181	J30-J39≠0 AND F30-F39≠0	$\rightarrow$	class=1	[0, 4]	17 : 83	-0.00	2
1190	Z00-Z13≠0 AND K00-K14≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1193	K00-K14≠0 AND H49-H52≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1194	K00-K14≠0 AND I80-I89≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1200 1201	I95-I99≠0 Z00-Z13≠0 AND F40-F48≠0	<b>→</b>	class=1 class=1	[0, 2]	25 : 75 25 : 75	-0.00 -0.00	1 2
1216		$\rightarrow$	class=1	[0, 2] [0, 2]	25 : 75	-0.00	2
1239	M15-M19≠0 AND K90-K95≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1246	H49-H52≠0 AND M15-M19≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1251	H49-H52≠0 AND I10-I16=0 AND R70-R79≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	3
1253	H49-H52≠0 AND C50-C50≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1261	N60-N65≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1
1267 1274	K20-K31≠0 AND B25-B34≠0 K20-K31≠0 AND H30-H36≠0	<b>→</b>	class=1 class=1	[0, 2]	25 : 75 25 : 75	-0.00 -0.00	2 2
1277	H49-H52≠0 AND R70-R79≠0	$\rightarrow$	class=1	[0, 2] [0, 2]	25 : 75 25 : 75	-0.00	2
1278	K20-K31≠0 AND H60-H62≠0	→	class=1	[0, 2]	25 : 75	-0.00	2
1283	Z00-Z13≠0 AND N40-N53≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1291	K20-K31≠0 AND F30-F39≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1293	K20-K31≠0 AND E70-E88≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1294	K20-K31≠0 AND F40-F48≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1305	Z00-Z13≠0 AND H49-H52≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1307 1317	H60-H62≠0 AND D10-D36≠0 K20-K31≠0 AND M70-M79≠0	$\rightarrow$	class=1 class=1	[0, 3] [0, 2]	20 : 80 25 : 75	-0.00 -0.00	2 2
1322	G50-G59≠0	<i>→</i>	class=1	[0, 2]	25 : 75 25 : 75	-0.00	1
1327	D10-D36≠0 AND E00-E07≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1331	D10-D36≠0	$\rightarrow$	class=1	[0, 4]	17 : 83	-0.00	1
1334	K20-K31≠0 AND K80-K87≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1337	K80-K87≠0 AND H10-H11≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1340	K80-K87≠0 AND I20-I25≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1345	K20-K31±0 AND N30-N39±0	<b>→</b>	class=1	[0, 2]	25 : 75	-0.00	2
1352 1354	K20-K31≠0 AND I10-I16≠0 K20-K31≠0 AND M15-M19≠0	$\rightarrow$	class=1 class=1	[0, 2] [0, 2]	25 : 75 25 : 75	-0.00 -0.00	2 2
1365	H10-H11≠0 AND M45-M49≠0	<i>→</i>	class=1	[0, 2]	25 : 75 25 : 75	-0.00	2
1368	H10-H11≠0 AND J40-J47≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2

1372	M45-M49≠0 AND N30-N39≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1379	J20-J22≠0 AND J00-J06≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1387	H10-H11≠0 AND E70-E88≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1391	H30-H36≠0 AND F40-F48≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1393	H30-H36≠0 AND H25-H28≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1397	J30-J39≠0 AND S80-S89≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1406	F20-F29≠0 AND F30-F39=0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1410	L55-L59≠0 AND C43-C44=0	$\rightarrow$	class=1	[0, 3]	20:80	-0.00	2
1415	E70-E88≠0 AND R00-R09≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1426	L80-L99≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1
1431	N00-N08≠0 AND G40-G47=0	$\rightarrow$	class=1	[0, 3]	20:80	-0.00	2
1433	R70-R79≠0 AND H40-H42=0 AND I10-I16=0	$\rightarrow$	class=1	[0, 4]	17:83	-0.00	3
1434	H60-H62≠0 AND age=Elder	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1436	H60-H62≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1
1441	D37-D48≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1
1446	S90-S99≠0 AND S80-S89=0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1450	F40-F48≠0 AND H40-H42≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1451	F40-F48≠0 AND I20-I25≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1461	H30-H36≠0 AND I30-I52=0 AND I10-I16≠0	$\rightarrow$	class=1	[0, 3]	20:80	-0.00	3
1462	R50-R69≠0 AND L00-L08≠0	$\rightarrow$	class=1	[0, 3]	20:80	-0.00	2
1476	M45-M49≠0 AND N20-N23≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1482	M80-M85≠0 AND M50-M54≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	2
1484	T15-T19≠0	$\rightarrow$	class=1	[0, 2]	25 : 75	-0.00	1

+ 1588 more

Target class: 1

CN2 rule inducer Naive Bayes Tree

Random Forest

Calibration Plot



