

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	0.664	0.965	0.961	0.958	0.965
Tree	0.500	0.971	0.957	0.943	0.971
Random Forest	0.621	0.971	0.957	0.943	0.971
Naive Bayes	0.648	0.963	0.954	0.945	0.963



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

0

97.1%, 12355/1272



Data domain

Features: A00-A09, A15-A19, A20-A28, A30-A49, A50-A64, A65-A69, A70-A74, A75-A79, A80-A89, A90-A99, B15-B19, B20-B20, B25-B34, B35-B49, B65-B83, B85-B89, B90-B94, B95-B97, C00-C14, C15-C26, C30-C39, C40-C41, C43-C44, C45-C49, C50-C50, C51-C58, C60-C63, C64-C68, C69-C72, C73-C75, C76-C80, C81-C96, D00-D09, D10-D36, D37-D48, D50-D53, D55-D59, D60-D64, D65-D69, D70-D77, D80-D89, E00-E07, E08-E13, E14-E14, E15-E16, E20-E35, E40-E46, E50-E64, E65-E68, E70-E88, E89-E89, F01-F09, F10-F19, F20-F29, F30-F39, F40-F48, F50-F59, F60-F69, F70-F79, F80-F89, F90-F98, G00-G09, G10-G14, G20-G26, G30-G32, G35-G37, G40-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 induction algorithm

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

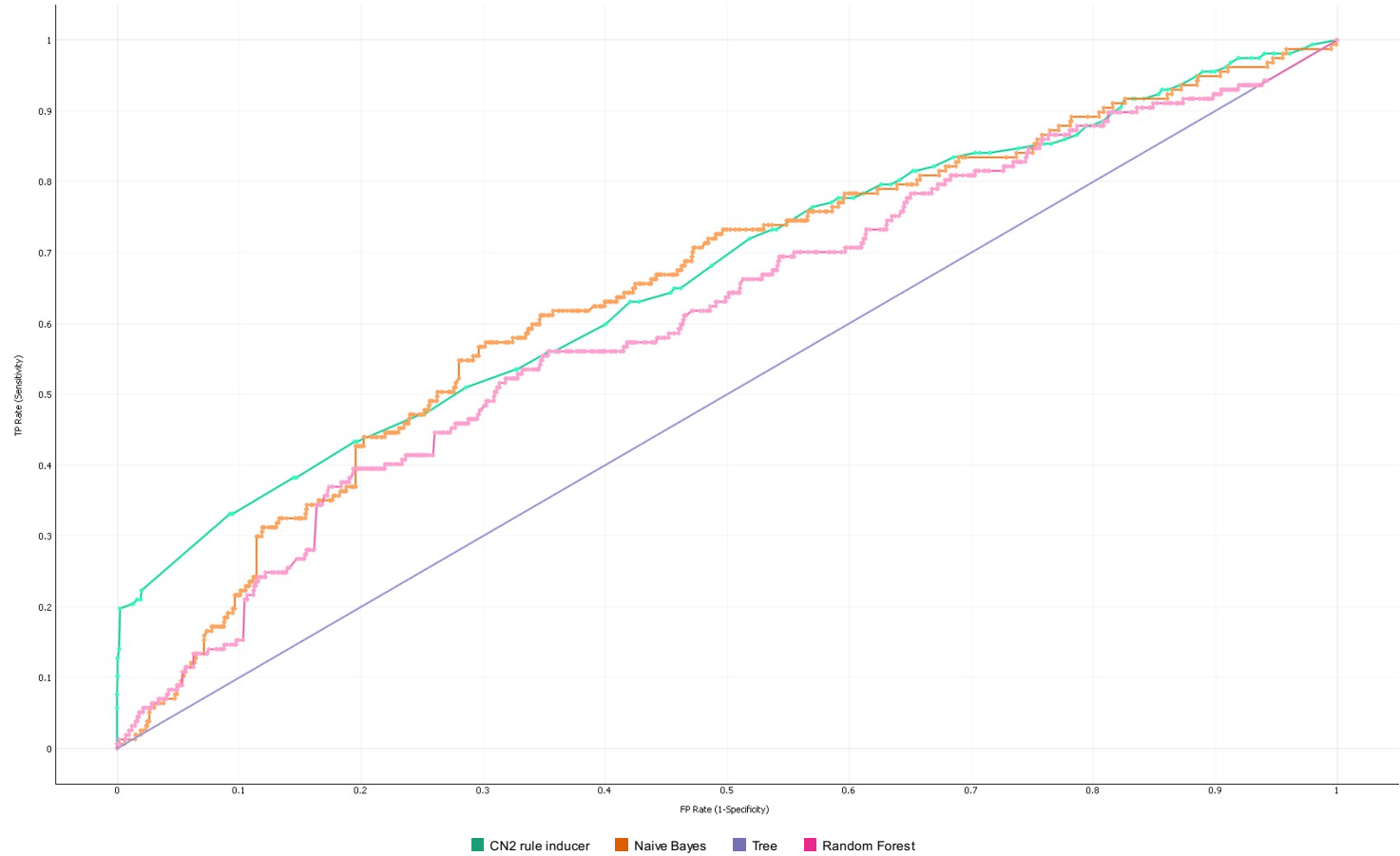
IF conditions	THEN class	Distribution	Probabilities [%]	Quality	Length
554	M50-M54#0 AND A50-A64#0 → class=1	[0, 3]	20 : 80	-0.00	2
607	Z00-Z13#0 AND H53-H54#0 → class=1	[0, 2]	25 : 75	-0.00	2
667	H60-H62#0 AND L55-L59#0 → class=1	[0, 2]	25 : 75	-0.00	2
689	Z00-Z13#0 AND I70-I79#0 → class=1	[0, 2]	25 : 75	-0.00	2
719	Z30-Z39#0 AND H10-H11#0 → class=1	[0, 2]	25 : 75	-0.00	2
731	J30-J39#0 AND H80-H83#0 → class=1	[0, 2]	25 : 75	-0.00	2
762	age=Middle-aged adult AND Z00-Z13#0 AND H65-H75#0 → class=1	[0, 2]	25 : 75	-0.00	3
835	age=Middle-aged adult AND R70-R79#0 → class=1	[0, 2]	25 : 75	-0.00	2
869	D10-D36#0 AND Z30-Z39#0 AND K50-K52#0 → class=1	[0, 2]	25 : 75	-0.00	3
874	Z30-Z39#0 → class=1	[0, 2]	25 : 75	-0.00	1
884	age=Middle-aged adult AND N40-N53#0 → class=1	[0, 2]	25 : 75	-0.00	2
887	S90-S99#0 AND J09-J18#0 → class=1	[0, 3]	20 : 80	-0.00	2
940	J00-J06#0 AND K00-K14#0 AND K80-K87#0 → class=1	[0, 2]	25 : 75	-0.00	3
942	M15-M19#0 AND F30-F39#0 → class=1	[0, 2]	25 : 75	-0.00	2
949	age=Middle-aged adult AND G40-G47#0 → class=1	[0, 2]	25 : 75	-0.00	2
950	age=Middle-aged adult AND K80-K87#0 → class=1	[0, 2]	25 : 75	-0.00	2
977	J20-J22#0 AND A30-A49#0 → class=1	[0, 2]	25 : 75	-0.00	2
1008	Z00-Z13#0 AND age=Young adult AND L49-L54#0 → class=1	[0, 2]	25 : 75	-0.00	3
1018	J30-J39#0 AND F80-F89#0 → class=1	[0, 2]	25 : 75	-0.00	2
1025	J30-J39#0 AND D10-D36#0 → class=1	[0, 2]	25 : 75	-0.00	2
1029	J30-J39#0 AND N30-N39#0 → class=1	[0, 2]	25 : 75	-0.00	2
1035	M15-M19#0 AND D10-D36#0 → class=1	[0, 2]	25 : 75	-0.00	2
1040	M15-M19#0 AND I80-I89#0 → class=1	[0, 2]	25 : 75	-0.00	2
1048	Z00-Z13#0 AND M50-M54#0 → class=1	[0, 2]	25 : 75	-0.00	2
1076	Z00-Z13#0 AND E70-E88#0 → class=1	[0, 2]	25 : 75	-0.00	2
1082	Z00-Z13#0 AND D10-D36#0 → class=1	[0, 2]	25 : 75	-0.00	2
1111	M50-M54#0 AND H00-H05#0 → class=1	[0, 2]	25 : 75	-0.00	2
1135	F50-F59#0 → class=1	[0, 2]	25 : 75	-0.00	1
1143	age=School-aged child AND I30-I52#0 → class=1	[0, 2]	25 : 75	-0.00	2
1196	age=Middle-aged adult AND H10-H11#0 AND K00-K14#0 AND F40-F48#0 → class=1	[0, 2]	25 : 75	-0.00	4
1206	H00-H05#0 → class=1	[0, 2]	25 : 75	-0.00	1
1220	age=Young adult AND J30-J39#0 AND R10-R19#0 → class=1	[0, 2]	25 : 75	-0.00	3
1230	age=Infant/Toddler AND Z00-Z13#0 AND R10-R19#0 → class=1	[0, 2]	25 : 75	-0.00	3
1233	Z00-Z13#0 AND F80-F89#0 → class=1	[0, 2]	25 : 75	-0.00	2
1244	H10-H11#0 AND H49-H52#0 AND L80-L99#0 → class=1	[0, 2]	25 : 75	-0.00	3
1251	H49-H52#0 AND S50-S59#0 → class=1	[0, 2]	25 : 75	-0.00	2
1255	H49-H52#0 AND J20-J22#0 → class=1	[0, 2]	25 : 75	-0.00	2
1256	H49-H52#0 AND Z77-Z99#0 → class=1	[0, 2]	25 : 75	-0.00	2
1261	H80-H83#0 → class=1	[0, 2]	25 : 75	-0.00	1
1265	S00-S09#0 AND G40-G47#0 → class=1	[0, 2]	25 : 75	-0.00	2
1276	H49-H52#0 AND age=Young adult AND H65-H75#0 → class=1	[0, 2]	25 : 75	-0.00	3
1292	H49-H52#0 AND I80-I89#0 → class=1	[0, 2]	25 : 75	-0.00	2
1299	H49-H52#0 AND E00-E07#0 → class=1	[0, 2]	25 : 75	-0.00	2
1307	I80-I89#0 → class=1	[0, 2]	25 : 75	-0.00	1
1309	age=Middle-aged adult AND H49-H52#0 → class=1	[0, 3]	20 : 80	-0.00	2
1343	T15-T19#0 → class=1	[0, 2]	25 : 75	-0.00	1
1353	K00-K14#0 AND D10-D36#0 → class=1	[0, 2]	25 : 75	-0.00	2
1359	M50-M54#0 AND E00-E07#0 → class=1	[0, 2]	25 : 75	-0.00	2
1364	E00-E07#0 AND H60-H62#0 → class=1	[0, 2]	25 : 75	-0.00	2
1366	D10-D36#0 AND N80-N98#0 → class=1	[0, 2]	25 : 75	-0.00	2
1367	D10-D36#0 AND S20-S29#0 → class=1	[0, 2]	25 : 75	-0.00	2
1371	D10-D36#0 → class=1	[0, 2]	25 : 75	-0.00	1
1385	age=School-aged child AND R00-R09#0 → class=1	[0, 2]	25 : 75	-0.00	2
1390	Z00-Z13#0 AND A00-A09#0 → class=1	[0, 3]	20 : 80	-0.00	2
1391	age#Young adult AND M70-M79#0 → class=1	[0, 2]	25 : 75	-0.00	2
1394	S60-S69#0 AND J00-J06#0 → class=1	[0, 2]	25 : 75	-0.00	2
1420	Z00-Z13#0 AND J00-J06#0 AND W50-W64#0 → class=1	[0, 2]	25 : 75	-0.00	3
1430	M15-M19#0 → class=1	[0, 2]	25 : 75	-0.00	1
1433	H49-H52#0 AND S00-S09#0 → class=1	[0, 2]	25 : 75	-0.00	2
1444	Z00-Z13#0 AND F40-F48#0 → class=1	[0, 2]	25 : 75	-0.00	2
1445	Z00-Z13#0 AND J30-J39#0 → class=1	[0, 2]	25 : 75	-0.00	2
1448	Z00-Z13#0 AND R00-R09#0 → class=1	[0, 2]	25 : 75	-0.00	2
1459	S00-S09#0 AND K00-K14#0 → class=1	[0, 2]	25 : 75	-0.00	2
1461	K00-K14#0 AND H10-H11#0 → class=1	[0, 2]	25 : 75	-0.00	2
1462	K00-K14#0 AND H60-H62#0 → class=1	[0, 2]	25 : 75	-0.00	2
1467	K00-K14#0 AND age=Young adult → class=1	[0, 2]	25 : 75	-0.00	2
1469	H10-H11#0 AND J00-J06#0 → class=1	[0, 3]	20 : 80	-0.00	2
1474	K20-K31#0 AND F40-F48#0 → class=1	[0, 3]	20 : 80	-0.00	2
1477	K20-K31#0 AND J20-J22#0 → class=1	[0, 2]	25 : 75	-0.00	2
1481	K20-K31#0 → class=1	[0, 2]	25 : 75	-0.00	1
1484	S00-S09#0 AND age=Middle-aged adult → class=1	[0, 2]	25 : 75	-0.00	2
1488	S00-S09#0 AND R50-R69#0 AND age=Elder → class=1	[0, 2]	25 : 75	-0.00	3
1499	H49-H52#0 AND age=Adolescent → class=1	[0, 2]	25 : 75	-0.00	2
1509	S50-S59#0 → class=1	[0, 2]	25 : 75	-0.00	1
1519	age=Elder AND J40-J47#0 → class=1	[0, 2]	25 : 75	-0.00	2
1521	R20-R23#0 → class=1	[0, 2]	25 : 75	-0.00	1
1529	Z20-Z29#0 AND age=Adolescent → class=1	[0, 2]	25 : 75	-0.00	2

1538	E08-E13#0 AND H49-H52=0	→ class=1	[0, 2]	25 : 75	-0.00	2
1543	L20-L30#0 AND H60-H62#0	→ class=1	[0, 2]	25 : 75	-0.00	2
1546	L20-L30#0 AND J30-J39#0	→ class=1	[0, 2]	25 : 75	-0.00	2
1553	J00-J06#0 AND J09-J18#0	→ class=1	[0, 3]	20 : 80	-0.00	2
1554	J20-J22#0 AND H65-H75#0	→ class=1	[0, 2]	25 : 75	-0.00	2
1556	H65-H75#0 AND age=Infant/Toddler	→ class=1	[0, 2]	25 : 75	-0.00	2
1562	J20-J22#0 AND age=Preschool child	→ class=1	[0, 2]	25 : 75	-0.00	2
1565	H30-H36#0	→ class=1	[0, 2]	25 : 75	-0.00	1
1572	H49-H52#0	→ class=1	[0, 2]	25 : 75	-0.00	1
1578	R50-R69#0 AND J20-J22=0 AND J00-J06#0	→ class=1	[0, 2]	25 : 75	-0.00	3
1585	B35-B49#0	→ class=1	[0, 2]	25 : 75	-0.00	1
1588	B85-B89#0	→ class=1	[0, 2]	25 : 75	-0.00	1
1591	age=Adolescent AND G40-G47=0 AND M20-M25=0 AND G80-G83=0 AND M40-M43=0	→ class=1	[0, 10]	8 : 92	-0.00	5
1595	F40-F48#0	→ class=1	[0, 4]	17 : 83	-0.00	1
1601	I30-I52#0 AND I20-I25=0	→ class=1	[0, 2]	25 : 75	-0.00	2
1602	age=Middle-aged adult AND J00-J06=0 AND N80-N98=0 AND E00-E07=0 AND E70-E88=0	→ class=1	[1, 11]	14 : 86	-0.414	5
1604	E70-E88#0	→ class=1	[1, 2]	40 : 60	-0.918	1
1608	N30-N39#0	→ class=1	[0, 2]	25 : 75	-0.00	1
1610	age=Young adult AND I10-I16=0 AND M20-M25=0 AND K55-K64=0 AND M50-M54=0	→ class=1	[8, 32]	21 : 79	-0.722	5
1611	H65-H75#0	→ class=1	[1, 2]	40 : 60	-0.918	1
1612	age=School-aged child AND Z00-Z13#0	→ class=1	[0, 2]	25 : 75	-0.00	2
1616	M40-M43#0	→ class=1	[1, 2]	40 : 60	-0.918	1
1618	age=Preschool child AND H53-H54=0 AND T36-T50=0	→ class=1	[0, 6]	12 : 88	-0.00	3
+ 1537 more						

ROC Analysis

Tue Jun 19 18, 19:18:02

Target class: 1



Target class: 1

