Distributions

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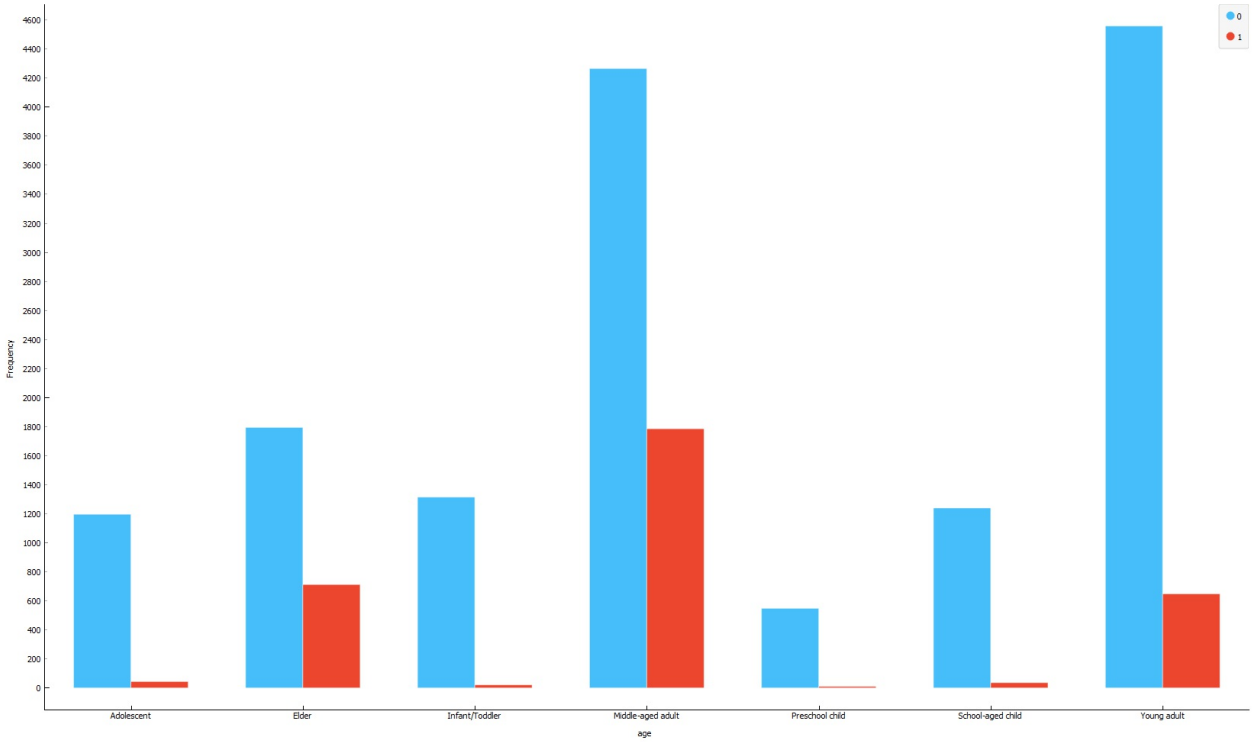

Distribution of 'age' grouped by 'class'

Test & Score

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Settings

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

Scores

Method	AUC	CA	F1	Precision	Recall
Random Forest	0.771	0.862	0.837	0.853	0.862
Tree	0.769	0.857	0.833	0.844	0.857
CN2 rule inducer	0.779	0.843	0.825	0.822	0.843
Naive Bayes	0.789	0.827	0.817	0.811	0.827

Tree Viewer

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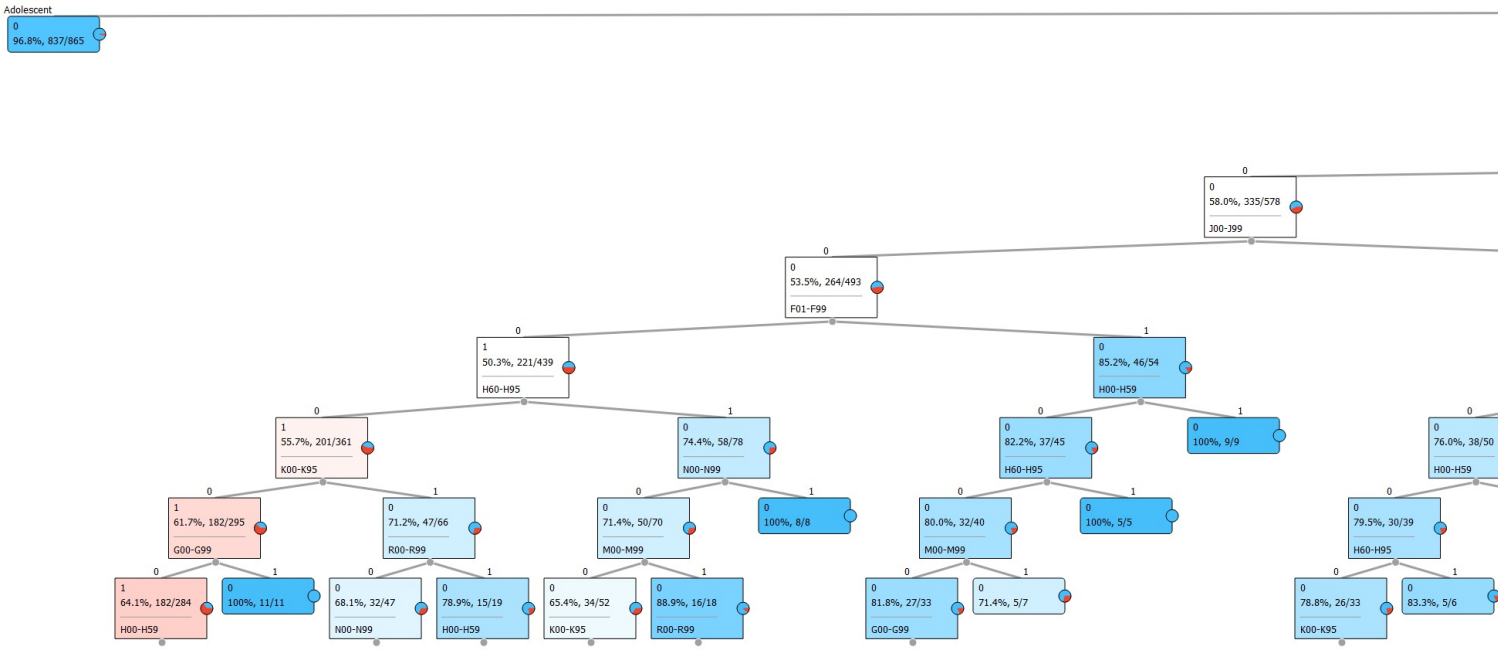
Tree size: 872 nodes, 439 leaves
Edge widths: Fixed
Target class: None



CN2 Rule Viewer

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Data domain

Features: A00-B99, C00-D49, D50-D89, F01-F99, G00-G99, H00-H59, H60-H95, I00-I99, J00-J99, K00-K95, L00-L99, M00-M99, N00-N99, O00-O9A, P00-P96, Q00-Q99, R00-R99, S00-T88, V00-Y99, Z00-Z99, age (total: 21 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
84	age=School-aged child AND S00-T88≠0 AND Q00-Q99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
133	S00-T88≠0 AND age=Young adult AND D50-D89≠0	→	class=1	[0, 4]	17 : 83	-0.00	3
170	age=Infant/Toddler AND Z00-Z99≠0 AND D50-D89≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
260	S00-T88≠0 AND Q00-Q99≠0	→	class=1	[0, 2]	25 : 75	-0.00	2
295	age=Young adult AND J00-J99≠0 AND Z00-Z99=0 AND O00-O9A≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
303	age=Young adult AND K00-K95≠0 AND G00-G99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
314	age=Adolescent AND L00-L99≠0 AND H60-H95≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
316	O00-O9A≠0 AND age=Middle-aged adult	→	class=1	[0, 2]	25 : 75	-0.00	2
322	age=Young adult AND J00-J99≠0 AND Z00-Z99=0 AND H60-H95≠0	→	class=1	[0, 3]	20 : 80	-0.00	4
337	V00-Y99≠0 AND I00-I99=0 AND D50-D89≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
353	L00-L99≠0 AND age=Young adult AND D50-D89≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
361	G00-G99≠0 AND age=Elder AND I00-I99=0 AND A00-B99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
362	G00-G99≠0 AND A00-B99≠0 AND S00-T88≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
378	S00-T88≠0 AND age=Middle-aged adult AND J00-J99=0 AND V00-Y99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
390	R00-R99≠0 AND N00-N99≠0 AND age=Adolescent	→	class=1	[0, 2]	25 : 75	-0.00	3
404	age=School-aged child AND G00-G99≠0	→	class=1	[0, 2]	25 : 75	-0.00	2
408	C00-D49≠0 AND age=Young adult AND S00-T88≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
413	S00-T88≠0 AND R00-R99≠0 AND V00-Y99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
418	J00-J99≠0 AND age=Preschool child	→	class=1	[0, 3]	20 : 80	-0.00	2
449	J00-J99≠0 AND age=Young adult AND Z00-Z99=0 AND R00-R99=0 AND A00-B99≠0	→	class=1	[0, 2]	25 : 75	-0.00	5
467	R00-R99≠0 AND K00-K95≠0 AND O00-O9A≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
471	K00-K95≠0 AND O00-O9A≠0	→	class=1	[0, 2]	25 : 75	-0.00	2
479	R00-R99≠0 AND K00-K95≠0 AND D50-D89≠0 AND H00-H59=0	→	class=1	[0, 2]	25 : 75	-0.00	4
481	A00-B99≠0 AND age=Young adult AND S00-T88≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
484	R00-R99≠0 AND O00-O9A≠0	→	class=1	[0, 3]	20 : 80	-0.00	2
486	R00-R99≠0 AND Q00-Q99≠0 AND H00-H59≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
490	A00-B99≠0 AND age=Young adult AND M00-M99≠0	→	class=1	[0, 4]	17 : 83	-0.00	3
493	R00-R99≠0 AND age=Young adult AND G00-G99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
500	M00-M99≠0 AND age=Young adult AND R00-R99=0 AND Z00-Z99=0 AND H00-H59≠0	→	class=1	[0, 2]	25 : 75	-0.00	5
511	R00-R99≠0 AND I00-I99=0 AND D50-D89≠0	→	class=1	[0, 3]	20 : 80	-0.00	3
514	S00-T88≠0 AND Z00-Z99=0 AND I00-I99≠0 AND age=Young adult AND F01-F99≠0	→	class=1	[0, 2]	25 : 75	-0.00	5
521	M00-M99≠0 AND H00-H59≠0 AND J00-J99=0 AND D50-D89≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
523	C00-D49≠0 AND age=Young adult AND Z00-Z99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
525	L00-L99≠0 AND R00-R99=0 AND H60-H95≠0 AND F01-F99≠0	→	class=1	[0, 3]	20 : 80	-0.00	4
536	M00-M99≠0 AND age=Young adult AND R00-R99=0 AND H00-H59≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
540	G00-G99≠0 AND age≠Middle-aged adult AND C00-D49≠0 AND H00-H59≠0	→	class=1	[0, 3]	20 : 80	-0.00	4

552	L00-L99≠0 AND K00-K95=0 AND F01-F99≠0 AND A00-B99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
560	F01-F99≠0 AND age=Elder AND S00-T88≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
562	F01-F99≠0 AND age≠Middle-aged adult AND S00-T88≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
570	age=Preschool child	→	class=1	[0, 2]	25 : 75	-0.00	1
574	R00-R99≠0 AND age=Middle-aged adult AND D50-D89≠0 AND C00-D49≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
578	H60-H95≠0 AND H00-H59≠0 AND I00-I99≠0 AND S00-T88≠0	→	class=1	[0, 6]	12 : 88	-0.00	4
586	J00-J99≠0 AND V00-Y99≠0 AND M00-M99=0	→	class=1	[0, 2]	25 : 75	-0.00	3
589	J00-J99≠0 AND D50-D89≠0 AND Z00-Z99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
595	F01-F99≠0 AND age=Elder AND C00-D49≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
596	F01-F99≠0 AND age=Young adult AND R00-R99≠0	→	class=1	[0, 3]	20 : 80	-0.00	3
600	R00-R99≠0 AND age=Young adult AND L00-L99≠0	→	class=1	[0, 3]	20 : 80	-0.00	3
601	N00-N99≠0 AND V00-Y99≠0	→	class=1	[0, 2]	25 : 75	-0.00	2
617	R00-R99≠0 AND age=Infant/Toddler AND L00-L99=0	→	class=1	[0, 2]	25 : 75	-0.00	3
618	R00-R99≠0 AND age=Middle-aged adult AND S00-T88≠0 AND G00-G99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
619	R00-R99≠0 AND S00-T88≠0 AND H60-H95≠0	→	class=1	[0, 3]	20 : 80	-0.00	3
625	K00-K95≠0 AND D50-D89≠0 AND F01-F99=0 AND H00-H59=0	→	class=1	[0, 2]	25 : 75	-0.00	4
626	K00-K95≠0 AND I00-I99=0 AND Z00-Z99≠0 AND S00-T88≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
629	K00-K95≠0 AND J00-J99=0 AND D50-D89≠0 AND F01-F99=0	→	class=1	[0, 2]	25 : 75	-0.00	4
634	H60-H95≠0 AND M00-M99=0 AND Z00-Z99≠0 AND A00-B99≠0	→	class=1	[0, 6]	12 : 88	-0.00	4
649	I00-I99≠0 AND C00-D49≠0 AND M00-M99≠0 AND G00-G99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
651	L00-L99≠0 AND N00-N99≠0 AND C00-D49≠0 AND F01-F99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
655	M00-M99≠0 AND J00-J99=0 AND I00-I99≠0 AND L00-L99≠0 AND G00-G99≠0	→	class=1	[0, 2]	25 : 75	-0.00	5
662	M00-M99≠0 AND V00-Y99≠0 AND K00-K95=0	→	class=1	[0, 3]	20 : 80	-0.00	3
664	I00-I99≠0 AND V00-Y99≠0	→	class=1	[0, 2]	25 : 75	-0.00	2
667	H00-H59≠0 AND age=Young adult AND F01-F99≠0	→	class=1	[0, 4]	17 : 83	-0.00	3
676	M00-M99≠0 AND D50-D89≠0 AND I00-I99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
687	K00-K95≠0 AND J00-J99=0 AND age=Middle-aged adult AND C00-D49≠0	→	class=1	[0, 5]	14 : 86	-0.00	4
693	S00-T88≠0 AND age=Elder AND A00-B99≠0 AND H60-H95≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
698	H60-H95≠0 AND J00-J99=0 AND A00-B99≠0 AND G00-G99=0	→	class=1	[0, 5]	14 : 86	-0.00	4
713	M00-M99≠0 AND K00-K95=0 AND G00-G99≠0 AND H60-H95≠0 AND F01-F99≠0	→	class=1	[0, 2]	25 : 75	-0.00	5
719	Z00-Z99≠0 AND age=Adolescent AND F01-F99=0	→	class=1	[0, 2]	25 : 75	-0.00	3
726	M00-M99≠0 AND K00-K95=0 AND G00-G99≠0 AND Z00-Z99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
729	M00-M99≠0 AND K00-K95=0 AND G00-G99≠0 AND J00-J99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
733	F01-F99≠0 AND age=Young adult	→	class=1	[0, 3]	20 : 80	-0.00	2
734	F01-F99≠0 AND C00-D49≠0 AND K00-K95≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
741	H00-H59≠0 AND age=Middle-aged adult AND S00-T88≠0 AND R00-R99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
750	I00-I99≠0 AND K00-K95=0 AND D50-D89≠0 AND H00-H59≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
754	I00-I99≠0 AND K00-K95=0 AND age=Elder AND A00-B99≠0 AND H00-H59≠0	→	class=1	[0, 2]	25 : 75	-0.00	5
755	I00-I99≠0 AND K00-K95=0 AND C00-D49≠0 AND J00-J99≠0 AND age≠Elder	→	class=1	[0, 2]	25 : 75	-0.00	5
766	age=Young adult AND N00-N99=0 AND L00-L99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
768	age=Young adult AND N00-N99=0 AND M00-M99=0 AND G00-G99=0 AND O00-O9A=0	→	class=1	[2, 120]	2 : 98	-0.121	5
769	Q00-Q99≠0 AND N00-N99=0 AND M00-M99=0	→	class=1	[0, 3]	20 : 80	-0.00	3
774	F01-F99≠0 AND Z00-Z99≠0 AND J00-J99≠0	→	class=1	[0, 6]	12 : 88	-0.00	3
779	age=School-aged child AND R00-R99=0 AND F01-F99=0	→	class=1	[0, 7]	11 : 89	-0.00	3
790	A00-B99≠0 AND R00-R99≠0 AND H00-H59≠0	→	class=1	[0, 3]	20 : 80	-0.00	3
792	A00-B99≠0 AND I00-I99=0 AND L00-L99≠0 AND M00-M99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
798	H00-H59≠0 AND A00-B99≠0 AND C00-D49≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
802	M00-M99≠0 AND K00-K95=0 AND J00-J99=0 AND I00-I99≠0 AND S00-T88≠0	→	class=1	[1, 3]	33 : 67	-0.811	5
804	M00-M99≠0 AND K00-K95=0 AND Z00-Z99≠0 AND C00-D49≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
808	S00-T88≠0 AND G00-G99≠0	→	class=1	[0, 2]	25 : 75	-0.00	2
810	age=Adolescent AND S00-T88=0 AND H00-H59=0 AND I00-I99=0	→	class=1	[0, 6]	12 : 88	-0.00	4
814	K00-K95≠0 AND A00-B99≠0 AND N00-N99≠0	→	class=1	[0, 3]	20 : 80	-0.00	3
816	H00-H59≠0 AND A00-B99≠0 AND L00-L99≠0	→	class=1	[0, 2]	25 : 75	-0.00	3
817	A00-B99≠0 AND age=Middle-aged adult AND K00-K95≠0 AND H00-H59=0	→	class=1	[0, 2]	25 : 75	-0.00	4
821	H00-H59≠0 AND A00-B99≠0 AND I00-I99=0	→	class=1	[0, 2]	25 : 75	-0.00	3
823	K00-K95≠0 AND I00-I99=0 AND R00-R99≠0 AND H00-H59=0	→	class=1	[0, 2]	25 : 75	-0.00	4
825	K00-K95≠0 AND I00-I99=0 AND C00-D49≠0 AND N00-N99=0	→	class=1	[1, 3]	33 : 67	-0.811	4
827	K00-K95≠0 AND S00-T88≠0 AND Z00-Z99≠0 AND H00-H59=0	→	class=1	[0, 2]	25 : 75	-0.00	4
829	K00-K95≠0 AND J00-J99=0 AND G00-G99≠0 AND H00-H59≠0	→	class=1	[0, 3]	20 : 80	-0.00	4
832	K00-K95≠0 AND F01-F99≠0 AND H00-H59≠0 AND age≠Elder	→	class=1	[0, 3]	20 : 80	-0.00	4
833	K00-K95≠0 AND J00-J99=0 AND F01-F99≠0 AND I00-I99≠0	→	class=1	[0, 2]	25 : 75	-0.00	4
836	F01-F99≠0 AND Z00-Z99≠0	→	class=1	[0, 4]	17 : 83	-0.00	2
840	H60-H95≠0 AND L00-L99≠0 AND J00-J99≠0	→	class=1	[0, 4]	17 : 83	-0.00	3
841	L00-L99≠0 AND G00-G99≠0	→	class=1	[0, 3]	20 : 80	-0.00	2

+ 973 more

ROC Analysis

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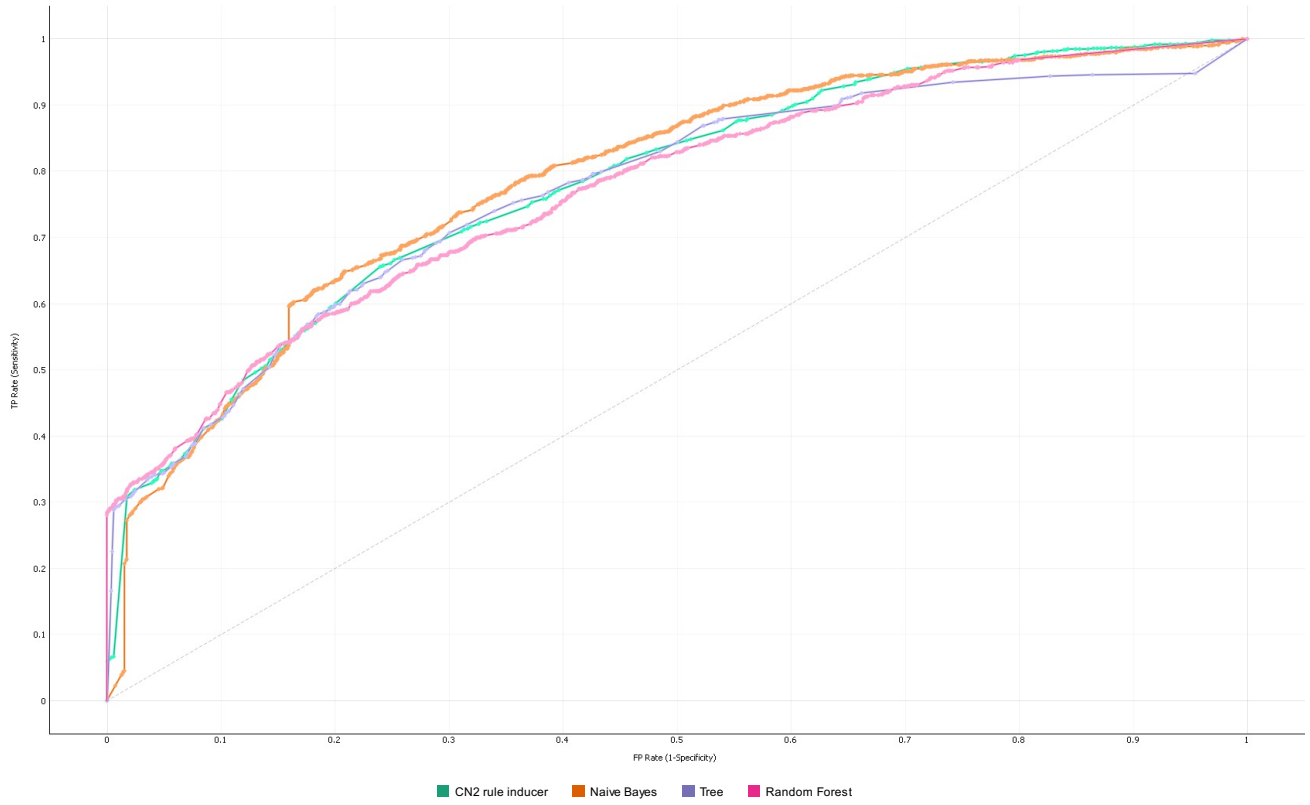
Target class: 1



Calibration Plot

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Target class: 1