



Erratum

Erratum to “A complete fuzzy decision tree technique” [Fuzzy Sets and Systems 138 (2003) 221–254][☆]

Cristina Oлару*, Louis Wehenkel

*University of Liège, Department of Electrical Engineering and Computer Science, Montefiore Institute, B28,
 B-4000, Liège, Belgium*

The publisher regrets that in the above article Tables 2,3,4 and 6 were printed incorrectly. The horizontal lines have been adjusted to indicate the correct demarcation between data sets. They are now reproduced correctly, below.

Table 2
 Comparing complexity and classification error rate

DB	GS size	Complexity				Error rate (%)				
		C4.5	ULG	CART	SDT	C4.5	ULG	CART	SDT (R)	SDT (B)
Omib	50	3.8	1.4	3.4	20.2	19.5	21.6	19.2	12.2	11.6
	250	12.4	7.7	22.2	52.1	11.2	11.9	11.0	4.9	4.7
	500	20.1	12.2	45.9	52.5	10.1	10.5	9.2	4.6	4.2
	1000	33.8	24.1	93.0	54.9	8.3	8.1	7.6	4.2	4.0
	1500	46.0	37.5	164.0	60.2	7.4	7.9	7.1	4.3	3.9
	2000	56.6	40.4	223.8	59.2	7.0	7.0	6.5	4.4	4.1
Two Norm	50	3.6	1.6	2.9	9.8	28.7	32.3	29.3	24.7	24.8
	250	14.6	9.1	13.2	53.1	22.9	24.1	23.2	14.8	14.7
	500	28.1	17.5	26.1	71.5	20.4	22.4	20.7	10.3	10.5
	750	39.4	33.7	38.2	81.7	19.0	19.9	19.9	8.3	7.6
	1000	51.9	41.7	53.9	83.4	18.1	19.8	19.0	7.3	6.1
	1500	74.5	56.4	77.9	88.7	17.4	19.5	18.5	6.4	4.1
Wave form	50	9	2	2	2	48.0	36.0	29.5	25.6	28.2
	250	22	10	4	25	26.4	28.4	26.3	21.0	21.9
	500	43	13	12	24	33.4	28.8	23.9	19.9	19.2
	1000	66	50	26	44	26.1	26.3	25.4	18.0	17.8
	1500	113	21	35	38	25.9	26.3	21.6	17.5	16.8
	2000	135	25	52	50	24.0	28.0	23.4	17.9	16.6

[☆] doi of the original article: 10.1016/S0165-0114(03)00089-7

* Corresponding author. Tel.: +32-4-3662718; fax: +32-43662984.

E-mail addresses: ana.olaru@ulg.ac.be (C. Oлару), l.wehenkel@ulg.ac.be (L. Wehenkel).

Table 3
SDT accuracy and complexity (before and after pruning)

DB	GS size	Error rate (%)				Complexity	
		G	P	R	B	Before	After
Omib	50	12.5	12.9	12.2	11.6	61.0	20.2
	250	7.5	8.1	4.9	4.7	110.0	52.1
	500	6.7	7.1	4.6	4.2	113.1	52.5
	1000	6.0	6.7	4.2	4.0	121.7	54.9
	1500	5.5	6.3	4.3	3.9	124.2	60.2
	2000	5.5	6.3	4.4	4.1	126.2	59.2
Twonorm	50	23.6	25.6	24.7	24.8	41.9	9.8
	250	16.1	17.1	14.8	14.7	159.0	53.1
	500	13.2	13.6	10.3	10.5	229.4	71.5
	750	11.2	11.2	8.3	7.6	256.7	81.7
	1000	9.7	10.0	7.3	6.1	254.1	83.4
	1500	8.9	9.1	6.4	4.1	245.3	88.7
Waveform	50	30.7	25.5	25.6	28.2	58	2
	250	23.2	22.4	21.0	21.9	104	25
	500	22.5	21.0	19.9	19.2	170	24
	1000	19.6	19.6	18.0	17.8	192	44
	1500	20.9	18.8	17.5	16.8	176	38
	2000	19.7	18.5	17.9	16.6	201	50

Table 4
Comparing CPU times

DB	GS size	CPU time				cy
		CART	ULG	SDT(R)	SDT(B)	
Omib	50	1.4 s	0.8 s	9.0 s	10.0 s	18
	250	2.5 s	1.7 s	25.0 s	2.2 m	32
	500	6.2 s	2.5 s	40.0 s	5.9 m	50
	1000	10.2 s	4.3 s	1.3 m	6.8 m	23
	1500	16.3 s	6.3 s	2.0 m	6.6 m	28
	2000	26.0 s	7.6 s	3.3 m	13.1 m	31
Twonorm	50	0.5 s	1.0 s	8.7 s	25.0 s	51
	250	1.1 s	2.5 s	36.6 s	2.6 m	51
	500	2.0 s	4.4 s	1.7 m	9.6 m	50
	750	2.5 s	6.6 s	3.4 m	10.0 m	50
	1000	5.4 s	11.6 s	4.2 m	14.6 m	50
	1500	5.6 s	16.0 s	9.8 m	22.2 m	46
Waveform	50	1.5 s	1.0 s	12.0 s	16.9 s	22
	250	3.0 s	2.5 s	44.5 s	3.3 m	41
	500	10.0 s	5.3 s	2.0 m	3.1 m	18
	1000	10.8 s	9.2 s	4.1 m	14.2 m	31
	1500	15.4 s	14.0 s	6.4 m	12.6 m	22
	2000	29.8 s	18.7 s	9.6 m	28.1 m	29

Table 6
Comparing global variance

DB	GS size	Var_{CART}	$Var_{SDT(R)}$	$Var_{SDT(B)}$
Omib	50	0.043301	0.055054	0.024785
	250	0.023058	0.005354	0.004777
	500	0.017687	0.002559	0.002264
	1000	0.013400	0.001253	0.001000
	1500	0.011501	0.000971	0.000835
	2000	0.009871	0.000825	0.000540
Twonorm	50	0.144617	0.093214	0.102976
	250	0.132754	0.056538	0.057105
	500	0.123566	0.035461	0.035188
	750	0.120671	0.026806	0.024246
	1000	0.116515	0.020694	0.018158
	1500	0.113813	0.016644	0.010020