

CCOD
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Banana database:

Attribute 1	Attribute 2	Class
2.22	-2.04	-1
-0.103	-1.71	-1
0.196	-1.71	-1
-0.508	-1.7	-1
-0.362	-1.7	-1
-0.697	-1.69	-1
-0.335	-1.69	-1
-0.129	-1.69	-1
-0.826	-1.67	-1
-0.558	-1.67	-1
-0.126	-1.67	-1
0.105	-1.67	-1
-0.0958	-1.66	-1
-0.0339	-1.66	-1
-1.01	-1.65	-1
0.0379	-1.64	-1
-0.796	-1.63	-1
-0.575	-1.62	-1
-0.566	-1.62	-1
-0.486	-1.62	-1
0.123	-1.62	-1
-0.956	-1.61	-1
-0.97	-1.6	-1
-0.597	-1.6	-1
-0.379	-1.6	-1
-0.888	-1.59	-1
-0.881	-1.59	-1
-0.45	-1.59	-1
0.0544	-1.59	-1
-0.934	-1.58	-1

•	•	•
-0.112	1.85	1
-0.0272	1.86	1
0.169	1.86	1
0.416	1.86	1
0.534	1.86	1
0.605	1.86	1
-0.283	1.88	1
0.942	1.89	1
-0.0203	1.92	1
0.667	1.92	1
0.75	1.92	1
0.0809	1.93	1
0.101	1.93	1
-0.635	1.94	1
0.452	1.95	1
0.216	1.96	1
-0.153	1.97	1
-0.0999	1.97	1
0.168	1.97	1
-0.353	1.98	1
0.364	1.98	1
0.764	1.98	1
-6.89E-04	2	1
-0.0601	2.04	1
0.133	2.04	1
0.713	2.04	1
-0.119	2.06	1
0.0605	2.06	1
0.171	2.11	1
-0.0814	2.18	1
-0.308	2.19	1

Attribute 1:

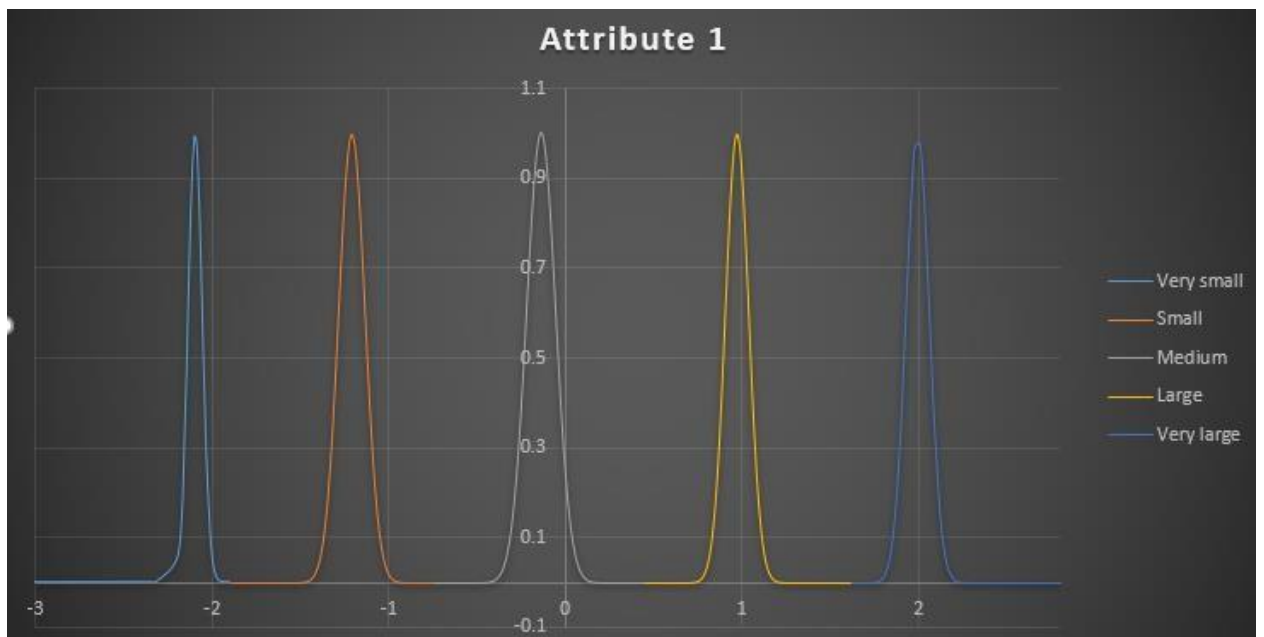
$$\text{Very small: } f = e^{-\left(\frac{x+2.09603}{0.05683}\right)^2};$$

$$\text{Small } f = e^{-\left(\frac{x+1.20761}{0.105265}\right)^2};$$

$$\text{Medium } f = e^{-\left(\frac{x+0.13451}{0.116203}\right)^2};;$$

$$\text{Large } f = e^{-\left(\frac{x-0.976095}{0.093193}\right)^2};$$

$$\text{Very large } f = e^{-\left(\frac{x-1.996647}{0.092057}\right)^2}.$$



Attribute 2:

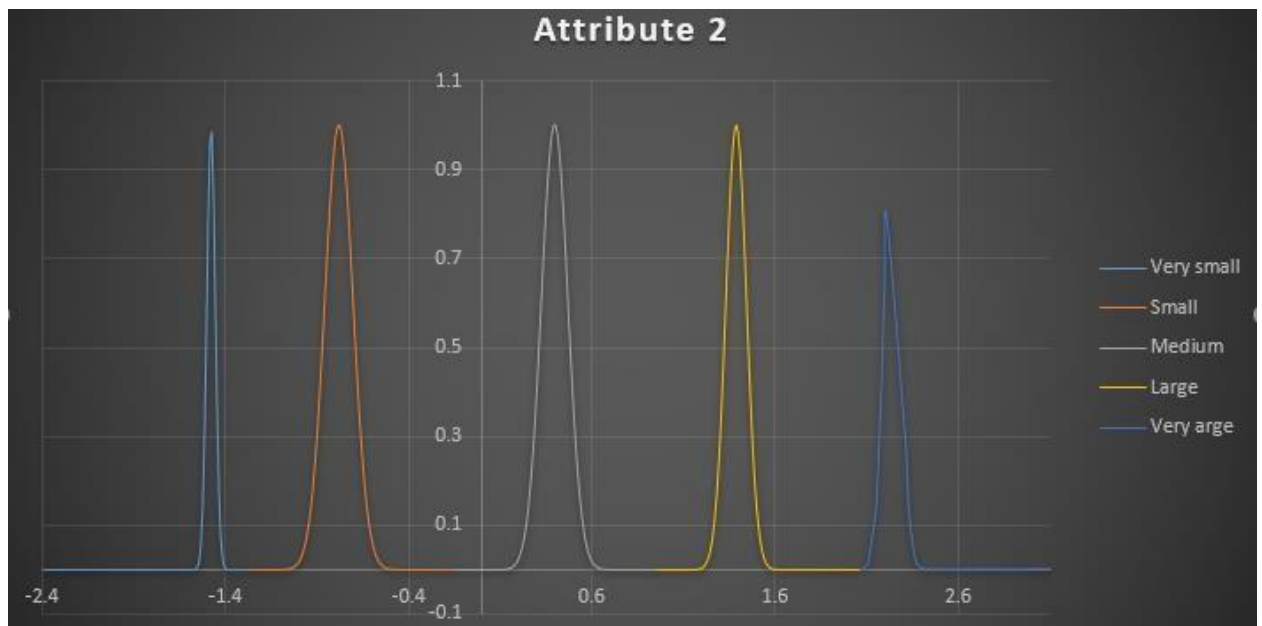
$$\text{Very small: } f = e^{-\left(\frac{x+1.47377}{0.032943}\right)^2};$$

$$\text{Small } f = e^{-\left(\frac{x+0.77476}{0.108979}\right)^2};$$

$$\text{Medium } f = e^{-\left(\frac{x-0.393977}{0.102341}\right)^2};;$$

$$\text{Large } f = e^{-\left(\frac{x-1.388358}{0.079547}\right)^2};$$

Very large $f = e^{-\left(\frac{x-2.240526}{0.063172}\right)^2}$.



Rules:

- 1) If x1 is medium AND x2 is very small THEN Class (-1),
- 2) If x1 is large AND x2 is medium THEN Class (1),
- 3) If x1 is very small AND x2 is very large THEN Other,

Analysis of the rules:

Attribute 1	Attribute 2	Class 1	Class -1	Result
0.318	1.82	1	-1	Good
1.89	1.34	1	-1	Good
0.326	1.45	1	-1	Good
-0.655	-1.44	1	-1	Good
1.85	1.61	1	-1	Good
1.15	1.49	1	-1	Good
0.261	0.214	1	-1	Good
-0.108	-0.793	1	-1	Good
-1.08	-1.39	1	-1	Good
0.342	-0.701	1	-1	Good
-0.0615	0.299	1	-1	Good
0.905	-0.994	1	Other	Not good
0.318	0.621	1	-1	Good
0.851	0.598	1	-1	Good
-0.66	1.41	1	-1	Good
0.908	0.127	1	-1	Good
1.18	1.36	1	-1	Good
0.999	0.811	1	-1	Good
-1.04	-0.0359	1	-1	Good
-0.492	0.124	1	-1	Good
0.409	-1.15	1	-1	Good
1.31	0.936	1	-1	Good
1.23	-1.4	1	-1	Good
-1.82	-1.78	1	-1	Good
-0.0723	-0.428	1	-1	Good
-0.0681	-1.24	1	-1	Good
-0.96	0.644	1	-1	Good
0.974	-1.47	1	-1	Good
0.0292	-1.21	1	-1	Good
-0.852	1.32	1	-1	Good
-0.777	1.22	1	1	No good
-0.379	-1.6	1	-1	Good
0.896	0.363	1	-1	Good
2.59	1.16	1	-1	Good
-0.489	-1.13	1	-1	Good
-1.12	-0.297	1	-1	Good
1.03	0.766	1	-1	Good
-0.621	0.425	1	-1	Good
-0.537	-0.223	1	-1	Good
1.85	-0.377	1	-1	Good
-0.0434	-0.442	1	-1	Good
0.856	0.669	-1	-1	Not good
-0.219	0.128	1	-1	Good
1.28	-0.588	1	-1	Good
-0.999	1.2	1	-1	Good
-0.834	-1.36	1	-1	Good
0.3	-1.18	1	-1	Good
1.05	-1.05	1	1	No good
-0.0203	-1.42	1	-1	Good
-0.157	1.84	1	-1	Good
0.208	-0.427	1	-1	Good
-0.21	1.35	1	-1	Good
-1.51	-0.196	1	-1	Good
1.46	-0.14	1	-1	Good
-0.78	-1.52	1	-1	Good
-0.00816	-1.38	1	-1	Good
-0.591	-1.08	Other	-1	Not good
-0.0202	-1.26	1	-1	Good
0.288	1.62	1	-1	Good
-1.51	0.384	1	-1	Good
-1.15	-0.508	1	-1	Good
0.245	-0.681	1	-1	Good
0.757	-0.208	1	-1	Good
-0.242	-1.47	1	-1	Good
1.01	1.21	1	-1	Good
0.651	0.744	1	-1	Good
1.4	0.746	1	-1	Good
0.0426	-1.18	1	-1	Good
-1.67	0.809	1	-1	Good
		97%	95%	92%