Threshold-based Probability Estimation

Measurement	Threshold	Threshold_Value	Probability_Larger	Probability_Smaller
load-15m	mean	9.8283	0.4206	0.5794
load-15m	10%(max)	3.3	0.8001	0.1999
load-15m	90%(max)	29.7	0.0061	0.9939
memory_used_pct	mean	10.2556	0.3592	0.6408
memory_used_pct	10%(max)	1.7263	1.0	0.0
memory_used_pct	90%(max)	15.5363	0.0013	0.9987
cpu-user	mean	0.0437	0.375	0.625
cpu-user	10%(max)	0.013	1.0	0.0
cpu-user	90%(max)	0.1174	0.014	0.986
cpu-system	mean	0.0358	0.3231	0.6769
cpu-system	10%(max)	0.0096	1.0	0.0
cpu-system	90%(max)	0.0864	0.009	0.991
sys-thermal	mean	1.0418	0.5873	0.4127
sys-thermal	10%(max)	0.365	0.5873	0.4127
sys-thermal	90%(max)	3.285	0.0102	0.9898
sys-interrupt-rate	mean	1048.3113	0.4092	0.5908
sys-interrupt-rate	10%(max)	145.915	1.0	0.0
sys-interrupt-rate	90%(max)	1313.235	0.0285	0.9715
disk-io-time	mean	0.0059	0.4686	0.5314
disk-io-time	10%(max)	0.0016	0.9294	0.0706
disk-io-time	90%(max)	0.0148	0.0046	0.9954

Crosstable Analysis Based on Mean Threshold

	x > Mean	x < Mean	Total
load-15m	28982	39928	68910
memory_used_pct	24754	44156	68910
cpu-user	25844	43066	68910
cpu-system	22266	46644	68910
sys-thermal	40470	28440	68910
sys-interrupt-rate	28195	40715	68910
disk-io-time	32292	36618	68910

Conditional Probability Analysis

Condition	Probability
P(load-15m > (mean) | memory_used_pct > (mean))	0.3138
P(load-15m < (mean) | memory_used_pct > (mean))	0.0454
P(load-15m > (mean) | cpu-user > (mean))	0.2308
P(load-15m < (mean) | cpu-user > (mean))	0.1442
P(load-15m > (mean) | cpu-system > (mean))	0.2106
P(load-15m < (mean) | cpu-system > (mean))	0.1125
P(load-15m > (mean) | sys-thermal > (mean))	0.2526
P(load-15m < (mean) | sys-thermal > (mean))	0.3347
P(load-15m < 10%(max) | sys-thermal < 10%(max))	0.0844
P(sys-thermal < 10%(max) | load-15m > 90%(max))	0.0023
P(load-15m > 90%(max) | sys-thermal < 10%(max))	0.0023
P(load-15m > (mean) | sys-interrupt-rate > (mean))	0.2214
P(load-15m < (mean) | sys-interrupt-rate > (mean))	0.1877
P(load-15m < 10%(max) | sys-interrupt-rate > 90%(max))	0.0015
P(sys-interrupt-rate > 90%(max) | load-15m < 10%(max))	0.0015
P(load-15m > (mean) | disk-io-time > (mean))	0.3019
P(load-15m < (mean) | disk-io-time > (mean))	0.1667
P(load-15m < 10%(max) | disk-io-time < 10%(max))	0.0212
P(memory_used_pct > (mean) | cpu-user > (mean))	0.2208
P(memory_used_pct < (mean) | cpu-user > (mean))	0.1542
P(memory_used_pct > (mean) | cpu-system > (mean))	0.2069
P(memory_used_pct < (mean) | cpu-system > (mean))	0.1162
P(memory_used_pct > (mean) | sys-thermal > (mean))	0.2174
P(memory_used_pct < (mean) | sys-thermal > (mean))	0.3699
P(memory_used_pct > (mean) | sys-interrupt-rate > (mean))	0.2066
P(memory_used_pct < (mean) | sys-interrupt-rate > (mean))	0.2026
P(memory_used_pct > (mean) | disk-io-time > (mean))	0.3004
P(memory_used_pct < (mean) | disk-io-time > (mean))	0.1682
P(cpu-user > (mean) | cpu-system > (mean))	0.2767
P(cpu-user < (mean) | cpu-system > (mean))	0.0465
P(cpu-user > 90%(max) | cpu-system > 90%(max))	0.0026
P(cpu-user > (mean) | sys-thermal > (mean))	0.223
P(cpu-user < (mean) | sys-thermal > (mean))	0.3643
P(sys-thermal < 10%(max) | cpu-user > 90%(max))	0.0049
P(cpu-user > 90%(max) | sys-thermal < 10%(max))	0.0049
P(cpu-user > (mean) | sys-interrupt-rate > (mean))	0.2414
P(cpu-user < (mean) | sys-interrupt-rate > (mean))	0.1678
P(cpu-user > 90%(max) | sys-interrupt-rate > 90%(max))	0.0016
P(cpu-user > (mean) | disk-io-time > (mean))	0.2478
P(cpu-user < (mean) | disk-io-time > (mean))	0.2208
P(cpu-system > (mean) | sys-thermal > (mean))	0.1943
P(cpu-system < (mean) | sys-thermal > (mean))	0.393
P(sys-thermal < 10%(max) | cpu-system > 90%(max))	0.0037
P(cpu-system > 90%(max) | sys-thermal < 10%(max))	0.0037
P(cpu-system > (mean) | sys-interrupt-rate > (mean))	0.2272
P(cpu-system < (mean) | sys-interrupt-rate > (mean))	0.1819
P(cpu-system > 90%(max) | sys-interrupt-rate > 90%(max))	0.0013
P(cpu-system > (mean) | disk-io-time > (mean))	0.2222
P(cpu-system < (mean) | disk-io-time > (mean))	0.2464
P(sys-thermal > (mean) | sys-interrupt-rate > (mean))	0.2453
P(sys-thermal < (mean) | sys-interrupt-rate > (mean))	0.1639
P(sys-thermal < 10%(max) | sys-interrupt-rate > 90%(max))	0.011
P(sys-interrupt-rate > 90%(max) | sys-thermal < 10%(max))	0.011
P(sys-thermal > (mean) | disk-io-time > (mean))	0.2821
P(sys-thermal < (mean) | disk-io-time > (mean))	0.1865
P(sys-thermal < 10%(max) | disk-io-time < 10%(max))	0.0302
P(sys-thermal < 10%(max) | disk-io-time > 90%(max))	0.0016
P(disk-io-time > 90%(max) | sys-thermal < 10%(max))	0.0016
P(sys-interrupt-rate > (mean) | disk-io-time > (mean))	0.2409
P(sys-interrupt-rate < (mean) | disk-io-time > (mean))	0.2277