

Threshold-based Probability Estimation

Measurement	Threshold	Threshold_Value	Probability_Larger	Probability_Smaller
load-15m	mean	0.0712	0.4873	0.5127
load-15m	10%(max)	0.025	0.7304	0.2696
load-15m	90%(max)	0.225	0.0064	0.9936
memory_used_pct	mean	11.1521	0.4522	0.5478
memory_used_pct	10%(max)	1.9183	1.0	0.0
memory_used_pct	90%(max)	17.2651	0.0007	0.9993
cpu-user	mean	0.0329	0.3352	0.6648
cpu-user	10%(max)	0.008	1.0	0.0
cpu-user	90%(max)	0.072	0.0076	0.9924
cpu-system	mean	0.0272	0.3077	0.6923
cpu-system	10%(max)	0.0062	1.0	0.0
cpu-system	90%(max)	0.0554	0.0095	0.9905
sys-thermal	mean	0.8195	0.5034	0.4966
sys-thermal	10%(max)	0.33	0.5035	0.4965
sys-thermal	90%(max)	2.97	0.0128	0.9872
sys-interrupt-rate	mean	624.1218	0.3878	0.6122
sys-interrupt-rate	10%(max)	103.85	1.0	0.0
sys-interrupt-rate	90%(max)	934.65	0.0096	0.9904
disk-io-time	mean	0.0051	0.5534	0.4466
disk-io-time	10%(max)	0.0013	0.846	0.154
disk-io-time	90%(max)	0.0117	0.0091	0.9909

## Crosstable Analysis Based on Mean Threshold

	x > Mean	x < Mean	Total
load-15m	32984	34702	67686
memory_used_pct	30610	37076	67686
cpu-user	22687	44999	67686
cpu-system	20826	46860	67686
sys-thermal	34075	33611	67686
sys-interrupt-rate	26249	41437	67686
disk-io-time	37457	30229	67686

Conditional Probability Analysis

Condition	Probability
P(load-15m > (mean)   memory_used_pct > (mean))	0.3473
P(load-15m < (mean)   memory_used_pct > (mean))	0.105
P(load-15m > (mean)   cpu-user > (mean))	0.2671
P(load-15m < (mean)   cpu-user > (mean))	0.0681
P(load-15m > (mean)   cpu-system > (mean))	0.2341
P(load-15m < (mean)   cpu-system > (mean))	0.0736
P(load-15m > (mean)   sys-thermal > (mean))	0.2466
P(load-15m < (mean)   sys-thermal > (mean))	0.2569
P(load-15m < 10%(max)   sys-thermal < 10%(max))	0.1342
P(load-15m < 10%(max)   sys-thermal > 90%(max))	0.003
P(sys-thermal < 10%(max)   load-15m > 90%(max))	0.0028
P(load-15m > 90%(max)   sys-thermal < 10%(max))	0.0028
P(sys-thermal > 90%(max)   load-15m < 10%(max))	0.003
P(load-15m > (mean)   sys-interrupt-rate > (mean))	0.2769
P(load-15m < (mean)   sys-interrupt-rate > (mean))	0.111
P(load-15m > (mean)   disk-io-time > (mean))	0.3146
P(load-15m < (mean)   disk-io-time > (mean))	0.2388
P(load-15m < 10%(max)   disk-io-time < 10%(max))	0.0687
P(memory_used_pct > (mean)   cpu-user > (mean))	0.2863
P(memory_used_pct < (mean)   cpu-user > (mean))	0.0489
P(memory_used_pct > (mean)   cpu-system > (mean))	0.2452
P(memory_used_pct < (mean)   cpu-system > (mean))	0.0625
P(memory_used_pct > (mean)   sys-thermal > (mean))	0.2289
P(memory_used_pct < (mean)   sys-thermal > (mean))	0.2745
P(memory_used_pct > (mean)   sys-interrupt-rate > (mean))	0.2961
P(memory_used_pct < (mean)   sys-interrupt-rate > (mean))	0.0917
P(memory_used_pct > (mean)   disk-io-time > (mean))	0.3282
P(memory_used_pct < (mean)   disk-io-time > (mean))	0.2252
P(cpu-user > (mean)   cpu-system > (mean))	0.2502
P(cpu-user < (mean)   cpu-system > (mean))	0.0575
P(cpu-user > (mean)   sys-thermal > (mean))	0.1706
P(cpu-user < (mean)   sys-thermal > (mean))	0.3328
P(sys-thermal < 10%(max)   cpu-user > 90%(max))	0.0037
P(cpu-user > 90%(max)   sys-thermal < 10%(max))	0.0037
P(cpu-user > (mean)   sys-interrupt-rate > (mean))	0.2724
P(cpu-user < (mean)   sys-interrupt-rate > (mean))	0.1154
P(cpu-user > 90%(max)   sys-interrupt-rate > 90%(max))	0.0012
P(cpu-user > (mean)   disk-io-time > (mean))	0.2455
P(cpu-user < (mean)   disk-io-time > (mean))	0.3079
P(cpu-system > (mean)   sys-thermal > (mean))	0.1573
P(cpu-system < (mean)   sys-thermal > (mean))	0.3461
P(sys-thermal < 10%(max)   cpu-system > 90%(max))	0.0043
P(cpu-system > 90%(max)   sys-thermal < 10%(max))	0.0043
P(cpu-system > (mean)   sys-interrupt-rate > (mean))	0.2613
P(cpu-system < (mean)   sys-interrupt-rate > (mean))	0.1266
P(cpu-system > 90%(max)   sys-interrupt-rate > 90%(max))	0.0018
P(cpu-system > (mean)   disk-io-time > (mean))	0.2187
P(cpu-system < (mean)   disk-io-time > (mean))	0.3346
P(sys-thermal > (mean)   sys-interrupt-rate > (mean))	0.1974
P(sys-thermal < (mean)   sys-interrupt-rate > (mean))	0.1904
P(sys-thermal < 10%(max)   sys-interrupt-rate > 90%(max))	0.0045
P(sys-interrupt-rate > 90%(max)   sys-thermal < 10%(max))	0.0045
P(sys-thermal > (mean)   disk-io-time > (mean))	0.2769
P(sys-thermal < (mean)   disk-io-time > (mean))	0.2765
P(sys-thermal < 10%(max)   disk-io-time < 10%(max))	0.0753
P(sys-thermal < 10%(max)   disk-io-time > 90%(max))	0.0042
P(disk-io-time < 10%(max)   sys-thermal > 90%(max))	0.0019
P(sys-thermal > 90%(max)   disk-io-time < 10%(max))	0.0019
P(disk-io-time > 90%(max)   sys-thermal < 10%(max))	0.0042
P(sys-interrupt-rate > (mean)   disk-io-time > (mean))	0.2811
P(sys-interrupt-rate < (mean)   disk-io-time > (mean))	0.2723