Threshold-based Probability Estimation

Measurement	Threshold	Threshold_Value	Probability_Larger	Probability_Smaller
load-15m	mean	10.0894	0.4153	0.5847
load-15m	10%(max)	3.5	0.7675	0.2325
load-15m	90%(max)	31.5	0.0084	0.9916
memory_used_pct	mean	3.3662	0.3862	0.6138
memory_used_pct	10%(max)	0.489	1.0	0.0
memory_used_pct	90%(max)	4.4007	0.0027	0.9973
cpu-user	mean	0.0503	0.4371	0.5629
cpu-user	10%(max)	0.014	1.0	0.0
cpu-user	90%(max)	0.126	0.0098	0.9902
cpu-system	mean	0.0368	0.4085	0.5915
cpu-system	10%(max)	0.0093	1.0	0.0
cpu-system	90%(max)	0.0833	0.0116	0.9884
sys-thermal	mean	0.6384	0.4581	0.5419
sys-thermal	10%(max)	0.3051	0.4759	0.5241
sys-thermal	90%(max)	2.7455	0.0005	0.9995
sys-interrupt-rate	mean	1046.9497	0.4058	0.5942
sys-interrupt-rate	10%(max)	135.01	1.0	0.0
sys-interrupt-rate	90%(max)	1215.09	0.0499	0.9501
disk-io-time	mean	0.0009	0.5655	0.4345
disk-io-time	10%(max)	0.0002	0.8548	0.1452
disk-io-time	90%(max)	0.002	0.0175	0.9825

Crosstable Analysis Based on Mean Threshold

	x > Mean	x < Mean	Total
load-15m	29590	41658	71248
memory_used_pct	27518	43730	71248
cpu-user	31144	40104	71248
cpu-system	29108	42140	71248
sys-thermal	32641	38607	71248
sys-interrupt-rate	28915	42333	71248
disk-io-time	40291	30957	71248

Conditional Probability Analysis

Condition	Probability
P(load-15m > (mean)	memory_used_pct > (mean))	0.3056
P(load-15m < (mean)	memory_used_pct > (mean))	0.0806
P(load-15m > (mean)	cpu-user > (mean))	0.2237
P(load-15m < (mean)	cpu-user > (mean))	0.2134
P(load-15m > (mean)	cpu-system > (mean))	0.2
P(load-15m < (mean)	cpu-system > (mean))	0.2086
P(load-15m > (mean)	sys-thermal > (mean))	0.1994
P(load-15m < (mean)	sys-thermal > (mean))	0.2588
P(load-15m < 10%(max)	sys-thermal < 10%(max))	0.1276
P(sys-thermal < 10%(max)	load-15m > 90%(max))	0.0038
P(load-15m > 90%(max)	sys-thermal < 10%(max))	0.0038
P(load-15m > (mean)	sys-interrupt-rate > (mean))	0.2385
P(load-15m < (mean)	sys-interrupt-rate > (mean))	0.1673
P(load-15m > 90%(max)	sys-interrupt-rate > 90%(max))	0.0013
P(load-15m > (mean)	disk-io-time > (mean))	0.2912
P(load-15m < (mean)	disk-io-time > (mean))	0.2743
P(load-15m < 10%(max)	disk-io-time < 10%(max))	0.0535
P(memory_used_pct > (mean)	cpu-user > (mean))	0.2281
P(memory_used_pct < (mean)	cpu-user > (mean))	0.2091
P(memory_used_pct > (mean)	cpu-system > (mean))	0.1987
P(memory_used_pct < (mean)	cpu-system > (mean))	0.2099
P(memory_used_pct > (mean)	sys-thermal > (mean))	0.1917
P(memory_used_pct < (mean)	sys-thermal > (mean))	0.2664
P(sys-thermal < 10%(max)	memory_used_pct > 90%(max))	0.0014
P(memory_used_pct > 90%(max)	sys-thermal < 10%(max))	0.0014
P(memory_used_pct > (mean)	sys-interrupt-rate > (mean))	0.2605
P(memory_used_pct < (mean)	sys-interrupt-rate > (mean))	0.1453
P(memory_used_pct > 90%(max)	sys-interrupt-rate > 90%(max))	0.0012
P(memory_used_pct > (mean)	disk-io-time > (mean))	0.3085
P(memory_used_pct < (mean)	disk-io-time > (mean))	0.257
P(cpu-user > (mean)	cpu-system > (mean))	0.3855
P(cpu-user < (mean)	cpu-system > (mean))	0.023
P(cpu-user > 90%(max)	cpu-system > 90%(max))	0.0047
P(cpu-user > (mean)	sys-thermal > (mean))	0.2066
P(cpu-user < (mean)	sys-thermal > (mean))	0.2516
P(sys-thermal < 10%(max)	cpu-user > 90%(max))	0.0029
P(cpu-user > 90%(max)	sys-thermal < 10%(max))	0.0029
P(cpu-user > (mean)	sys-interrupt-rate > (mean))	0.273
P(cpu-user < (mean)	sys-interrupt-rate > (mean))	0.1328
P(cpu-user > 90%(max)	sys-interrupt-rate > 90%(max))	0.006
P(cpu-user > (mean)	disk-io-time > (mean))	0.2851
P(cpu-user < (mean)	disk-io-time > (mean))	0.2804
P(cpu-system > (mean)	sys-thermal > (mean))	0.1929
P(cpu-system < (mean)	sys-thermal > (mean))	0.2653
P(sys-thermal < 10%(max)	cpu-system > 90%(max))	0.0036
P(cpu-system > 90%(max)	sys-thermal < 10%(max))	0.0036
P(cpu-system > (mean)	sys-interrupt-rate > (mean))	0.251
P(cpu-system < (mean)	sys-interrupt-rate > (mean))	0.1549
P(cpu-system > 90%(max)	sys-interrupt-rate > 90%(max))	0.0065
P(cpu-system > (mean)	disk-io-time > (mean))	0.2604
P(cpu-system < (mean)	disk-io-time > (mean))	0.3051
P(sys-thermal > (mean)	sys-interrupt-rate > (mean))	0.1951
P(sys-thermal < (mean)	sys-interrupt-rate > (mean))	0.2107
P(sys-thermal < 10%(max)	sys-interrupt-rate > 90%(max))	0.0199
P(sys-interrupt-rate > 90%(max)	sys-thermal < 10%(max))	0.0199
P(sys-thermal > (mean)	disk-io-time > (mean))	0.2672
P(sys-thermal < (mean)	disk-io-time > (mean))	0.2983
P(sys-thermal < 10%(max)	disk-io-time < 10%(max))	0.0795
P(sys-thermal < 10%(max)	disk-io-time > 90%(max))	0.0082
P(disk-io-time > 90%(max)	sys-thermal < 10%(max))	0.0082
P(sys-interrupt-rate > (mean)	disk-io-time > (mean))	0.3027
P(sys-interrupt-rate < (mean)	disk-io-time > (mean))	0.2628
P(sys-interrupt-rate > 90%(max)	disk-io-time > 90%(max))	0.0037