

Threshold-based Probability Estimation

Measurement	Threshold	Threshold_Value	Probability_Larger	Probability_Smaller
load-15m	mean	6.3803	0.4897	0.5103
load-15m	10%(max)	2.4	0.674	0.326
load-15m	90%(max)	21.6	0.0075	0.9925
memory_used_pct	mean	5.309	0.3749	0.6251
memory_used_pct	10%(max)	0.8192	1.0	0.0
memory_used_pct	90%(max)	7.3725	0.0031	0.9969
cpu-user	mean	0.0363	0.4352	0.5648
cpu-user	10%(max)	0.01	1.0	0.0
cpu-user	90%(max)	0.09	0.018	0.982
cpu-system	mean	0.03	0.3851	0.6149
cpu-system	10%(max)	0.0072	1.0	0.0
cpu-system	90%(max)	0.0644	0.016	0.984
sys-thermal	mean	0.5792	0.4372	0.5628
sys-thermal	10%(max)	0.285	0.441	0.559
sys-thermal	90%(max)	2.565	0.0004	0.9996
sys-interrupt-rate	mean	842.4504	0.4272	0.5728
sys-interrupt-rate	10%(max)	115.815	1.0	0.0
sys-interrupt-rate	90%(max)	1042.335	0.0227	0.9773
disk-io-time	mean	0.0004	0.423	0.577
disk-io-time	10%(max)	0.0001	0.7533	0.2467
disk-io-time	90%(max)	0.0011	0.0085	0.9915

Crosstable Analysis Based on Mean Threshold

	x > Mean	x < Mean	Total
load-15m	34558	36018	70576
memory_used_pct	26458	44118	70576
cpu-user	30714	39862	70576
cpu-system	27182	43394	70576
sys-thermal	30854	39722	70576
sys-interrupt-rate	30150	40426	70576
disk-io-time	29856	40720	70576

Conditional Probability Analysis

Condition	Probability
P(load-15m > (mean) memory_used_pct > (mean))	0.3491
P(load-15m < (mean) memory_used_pct > (mean))	0.0257
P(load-15m > (mean) cpu-user > (mean))	0.2719
P(load-15m < (mean) cpu-user > (mean))	0.1633
P(load-15m > (mean) cpu-system > (mean))	0.251
P(load-15m < (mean) cpu-system > (mean))	0.1342
P(load-15m < 10%(max) cpu-system > 90%(max))	0.0012
P(cpu-system > 90%(max) load-15m < 10%(max))	0.0012
P(load-15m > (mean) sys-thermal > (mean))	0.2179
P(load-15m < (mean) sys-thermal > (mean))	0.2193
P(load-15m < 10%(max) sys-thermal < 10%(max))	0.1863
P(sys-thermal < 10%(max) load-15m > 90%(max))	0.0037
P(load-15m > 90%(max) sys-thermal < 10%(max))	0.0037
P(load-15m > (mean) sys-interrupt-rate > (mean))	0.2776
P(load-15m < (mean) sys-interrupt-rate > (mean))	0.1496
P(load-15m > (mean) disk-io-time > (mean))	0.2525
P(load-15m < (mean) disk-io-time > (mean))	0.1706
P(load-15m < 10%(max) disk-io-time < 10%(max))	0.109
P(memory_used_pct > (mean) cpu-user > (mean))	0.2421
P(memory_used_pct < (mean) cpu-user > (mean))	0.1931
P(memory_used_pct > (mean) cpu-system > (mean))	0.23
P(memory_used_pct < (mean) cpu-system > (mean))	0.1552
P(memory_used_pct > (mean) sys-thermal > (mean))	0.1687
P(memory_used_pct < (mean) sys-thermal > (mean))	0.2685
P(sys-thermal < 10%(max) memory_used_pct > 90%(max))	0.0016
P(memory_used_pct > 90%(max) sys-thermal < 10%(max))	0.0016
P(memory_used_pct > (mean) sys-interrupt-rate > (mean))	0.252
P(memory_used_pct < (mean) sys-interrupt-rate > (mean))	0.1752
P(memory_used_pct > 90%(max) sys-interrupt-rate > 90%(max))	0.0012
P(memory_used_pct > (mean) disk-io-time > (mean))	0.2189
P(memory_used_pct < (mean) disk-io-time > (mean))	0.2041
P(cpu-user > (mean) cpu-system > (mean))	0.3399
P(cpu-user < (mean) cpu-system > (mean))	0.0452
P(cpu-user > 90%(max) cpu-system > 90%(max))	0.0078
P(cpu-user > (mean) sys-thermal > (mean))	0.1914
P(cpu-user < (mean) sys-thermal > (mean))	0.2457
P(sys-thermal < 10%(max) cpu-user > 90%(max))	0.0089
P(cpu-user > 90%(max) sys-thermal < 10%(max))	0.0089
P(cpu-user > (mean) sys-interrupt-rate > (mean))	0.2729
P(cpu-user < (mean) sys-interrupt-rate > (mean))	0.1543
P(cpu-user > 90%(max) sys-interrupt-rate > 90%(max))	0.0014
P(cpu-user > (mean) disk-io-time > (mean))	0.2224
P(cpu-user < (mean) disk-io-time > (mean))	0.2007
P(cpu-system > (mean) sys-thermal > (mean))	0.1715
P(cpu-system < (mean) sys-thermal > (mean))	0.2656
P(sys-thermal < 10%(max) cpu-system > 90%(max))	0.0089
P(cpu-system > 90%(max) sys-thermal < 10%(max))	0.0089
P(cpu-system > (mean) sys-interrupt-rate > (mean))	0.262
P(cpu-system < (mean) sys-interrupt-rate > (mean))	0.1652
P(cpu-system > 90%(max) sys-interrupt-rate > 90%(max))	0.002
P(cpu-system > (mean) disk-io-time > (mean))	0.2026
P(cpu-system < (mean) disk-io-time > (mean))	0.2205
P(disk-io-time < 10%(max) cpu-system > 90%(max))	0.0012
P(cpu-system > 90%(max) disk-io-time < 10%(max))	0.0012
P(sys-thermal > (mean) sys-interrupt-rate > (mean))	0.1924
P(sys-thermal < (mean) sys-interrupt-rate > (mean))	0.2348
P(sys-thermal < 10%(max) sys-interrupt-rate > 90%(max))	0.0121
P(sys-interrupt-rate > 90%(max) sys-thermal < 10%(max))	0.0121
P(sys-thermal > (mean) disk-io-time > (mean))	0.1885
P(sys-thermal < (mean) disk-io-time > (mean))	0.2345
P(sys-thermal < 10%(max) disk-io-time < 10%(max))	0.14
P(sys-thermal < 10%(max) disk-io-time > 90%(max))	0.0046
P(disk-io-time > 90%(max) sys-thermal < 10%(max))	0.0046
P(sys-interrupt-rate > (mean) disk-io-time > (mean))	0.227
P(sys-interrupt-rate < (mean) disk-io-time > (mean))	0.196
P(sys-interrupt-rate > 90%(max) disk-io-time > 90%(max))	0.001
P(disk-io-time < 10%(max) sys-interrupt-rate > 90%(max))	0.0011
P(sys-interrupt-rate > 90%(max) disk-io-time < 10%(max))	0.0011