

Threshold-based Probability Estimation

Measurement	Threshold	Threshold_Value	Probability_Larger	Probability_Smaller
load-15m	mean	6.1486	0.4178	0.5822
load-15m	10%(max)	2.6	0.5933	0.4067
load-15m	90%(max)	23.4	0.0175	0.9825
memory_used_pct	mean	12.7416	0.3494	0.6506
memory_used_pct	10%(max)	2.0908	1.0	0.0
memory_used_pct	90%(max)	18.8172	0.0005	0.9995
cpu-user	mean	0.0273	0.4111	0.5889
cpu-user	10%(max)	0.0052	1.0	0.0
cpu-user	90%(max)	0.0464	0.0134	0.9866
cpu-system	mean	0.0241	0.3939	0.6061
cpu-system	10%(max)	0.0039	1.0	0.0
cpu-system	90%(max)	0.0355	0.0211	0.9789
sys-thermal	mean	0.538	0.3645	0.6355
sys-thermal	10%(max)	0.325	0.3649	0.6351
sys-thermal	90%(max)	2.925	0.0005	0.9995
sys-interrupt-rate	mean	769.6248	0.3894	0.6106
sys-interrupt-rate	10%(max)	102.05	1.0	0.0
sys-interrupt-rate	90%(max)	918.45	0.0324	0.9676
disk-io-time	mean	0.0004	0.4302	0.5698
disk-io-time	10%(max)	0.0002	0.4367	0.5633
disk-io-time	90%(max)	0.0018	0.0029	0.9971

Crosstable Analysis Based on Mean Threshold

	x > Mean	x < Mean	Total
load-15m	28412	39585	67997
memory_used_pct	23756	44241	67997
cpu-user	27953	40044	67997
cpu-system	26787	41210	67997
sys-thermal	24786	43211	67997
sys-interrupt-rate	26480	41517	67997
disk-io-time	29255	38742	67997

Conditional Probability Analysis

Condition	Probability
P(load-15m > (mean) memory_used_pct > (mean))	0.2309
P(load-15m < (mean) memory_used_pct > (mean))	0.1185
P(load-15m > (mean) cpu-user > (mean))	0.2152
P(load-15m < (mean) cpu-user > (mean))	0.1959
P(load-15m < 10%(max) cpu-user > 90%(max))	0.0025
P(cpu-user > 90%(max) load-15m < 10%(max))	0.0025
P(load-15m > (mean) cpu-system > (mean))	0.2046
P(load-15m < (mean) cpu-system > (mean))	0.1893
P(load-15m < 10%(max) cpu-system > 90%(max))	0.0027
P(cpu-system > 90%(max) load-15m < 10%(max))	0.0027
P(load-15m > (mean) sys-thermal > (mean))	0.1519
P(load-15m < (mean) sys-thermal > (mean))	0.2126
P(load-15m < 10%(max) sys-thermal < 10%(max))	0.258
P(sys-thermal < 10%(max) load-15m > 90%(max))	0.0109
P(load-15m > 90%(max) sys-thermal < 10%(max))	0.0109
P(load-15m > (mean) sys-interrupt-rate > (mean))	0.212
P(load-15m < (mean) sys-interrupt-rate > (mean))	0.1774
P(load-15m < 10%(max) sys-interrupt-rate > 90%(max))	0.0041
P(sys-interrupt-rate > 90%(max) load-15m < 10%(max))	0.0041
P(load-15m > (mean) disk-io-time > (mean))	0.2066
P(load-15m < (mean) disk-io-time > (mean))	0.2236
P(load-15m < 10%(max) disk-io-time < 10%(max))	0.2606
P(disk-io-time < 10%(max) load-15m > 90%(max))	0.0089
P(load-15m > 90%(max) disk-io-time < 10%(max))	0.0089
P(memory_used_pct > (mean) cpu-user > (mean))	0.2501
P(memory_used_pct < (mean) cpu-user > (mean))	0.161
P(memory_used_pct > (mean) cpu-system > (mean))	0.2316
P(memory_used_pct < (mean) cpu-system > (mean))	0.1623
P(memory_used_pct > (mean) sys-thermal > (mean))	0.1307
P(memory_used_pct < (mean) sys-thermal > (mean))	0.2338
P(memory_used_pct > (mean) sys-interrupt-rate > (mean))	0.2569
P(memory_used_pct < (mean) sys-interrupt-rate > (mean))	0.1325
P(memory_used_pct > (mean) disk-io-time > (mean))	0.2187
P(memory_used_pct < (mean) disk-io-time > (mean))	0.2116
P(cpu-user > (mean) cpu-system > (mean))	0.244
P(cpu-user < (mean) cpu-system > (mean))	0.1499
P(cpu-user > 90%(max) cpu-system > 90%(max))	0.0018
P(cpu-user > (mean) sys-thermal > (mean))	0.152
P(cpu-user < (mean) sys-thermal > (mean))	0.2125
P(sys-thermal < 10%(max) cpu-user > 90%(max))	0.0081
P(cpu-user > 90%(max) sys-thermal < 10%(max))	0.0081
P(cpu-user > (mean) sys-interrupt-rate > (mean))	0.2665
P(cpu-user < (mean) sys-interrupt-rate > (mean))	0.1229
P(cpu-user > 90%(max) sys-interrupt-rate > 90%(max))	0.0033
P(cpu-user > (mean) disk-io-time > (mean))	0.2125
P(cpu-user < (mean) disk-io-time > (mean))	0.2178
P(disk-io-time < 10%(max) cpu-user > 90%(max))	0.0042
P(cpu-user > 90%(max) disk-io-time < 10%(max))	0.0042
P(cpu-system > (mean) sys-thermal > (mean))	0.1452
P(cpu-system < (mean) sys-thermal > (mean))	0.2194
P(sys-thermal < 10%(max) cpu-system > 90%(max))	0.0129
P(cpu-system > 90%(max) sys-thermal < 10%(max))	0.0129
P(cpu-system > (mean) sys-interrupt-rate > (mean))	0.2567
P(cpu-system < (mean) sys-interrupt-rate > (mean))	0.1327
P(cpu-system > 90%(max) sys-interrupt-rate > 90%(max))	0.0113
P(cpu-system > (mean) disk-io-time > (mean))	0.2021
P(cpu-system < (mean) disk-io-time > (mean))	0.2281
P(disk-io-time < 10%(max) cpu-system > 90%(max))	0.0074
P(cpu-system > 90%(max) disk-io-time < 10%(max))	0.0074
P(sys-thermal > (mean) sys-interrupt-rate > (mean))	0.1441
P(sys-thermal < (mean) sys-interrupt-rate > (mean))	0.2453
P(sys-thermal < 10%(max) sys-interrupt-rate > 90%(max))	0.0196
P(sys-interrupt-rate > 90%(max) sys-thermal < 10%(max))	0.0196
P(sys-thermal > (mean) disk-io-time > (mean))	0.158
P(sys-thermal < (mean) disk-io-time > (mean))	0.2723
P(sys-thermal < 10%(max) disk-io-time < 10%(max))	0.3591
P(sys-thermal < 10%(max) disk-io-time > 90%(max))	0.0018
P(disk-io-time > 90%(max) sys-thermal < 10%(max))	0.0018
P(sys-interrupt-rate > (mean) disk-io-time > (mean))	0.2115
P(sys-interrupt-rate < (mean) disk-io-time > (mean))	0.2188
P(disk-io-time < 10%(max) sys-interrupt-rate > 90%(max))	0.0109
P(sys-interrupt-rate > 90%(max) disk-io-time < 10%(max))	0.0109