

# Summarising Data - Failure Detector Model

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```
## -- Attaching packages ----- tidyverse 1.3.0 --

## v ggplot2 3.3.5      v purrr 0.3.4
## v tibble 3.1.0       v dplyr 1.0.5
## v tidyr 1.1.3        v stringr 1.4.0
## v readr 1.4.0        v forcats 0.5.1

## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()

##
## -- Column specification -----
## cols(
##   Count = col_double(),
##   Vm = col_double(),
##   CPU1 = col_double(),
##   CPU2 = col_double(),
##   CPU3 = col_double(),
##   CPU4 = col_double(),
##   MEAN = col_double(),
##   VAR = col_double(),
##   STATUS = col_character()
## )

## Warning: Unknown or uninitialised column: `Status`.

## # A tibble: 30,999 x 8
##       Vm      CPU1      CPU2      CPU3      CPU4 Variance  Mean Status
##   <dbl>   <dbl>   <dbl>   <dbl>   <dbl>   <dbl> <dbl> <chr>
## 1     5 13.0    37.9    42.1    46.8     229.  35.0 DEGRADED
## 2     3  8.07    35.6    39.6    44.0     262.  31.8 DEGRADED
## 3     6 0.0236   0.0257  0.0267  0.0279      0   0.03 FUNCTIONAL
## 4     3  6.29     6.29    60.6    63.1    1029.  34.1 DEGRADED
## 5     6 14.1     14.6    53.7    56.5     554.  34.7 DEGRADED
## 6     4  0.833    0.868    0.886    0.904      0   0.87 FUNCTIONAL
## 7     6 13.7     13.9    15.0    49.1     305.  22.9 DEGRADED
## 8     3  2.40     2.42     2.44     2.47      0   2.43 FUNCTIONAL
## 9     6  1.87     1.89     1.91     1.93      0   1.9  FUNCTIONAL
## 10    4 26.2     28.0    29.2    74.7     552.  39.5 DEGRADED
## # ... with 30,989 more rows

## Loading required package: table1

##
## Attaching package: 'table1'
```

```
## The following objects are masked from 'package:base':
##
##     units, units<-
```

	DEGRADED	FUNCTIONAL
	(N=14999)	(N=16000)
<b>CPU1</b>		
Mean (SD)	18.3 (12.1)	1.85 (1.81)
Median [Min, Max]	15.7 [0.0554, 86.6]	1.21 [0.000350, 22.8]
<b>CPU2</b>		
Mean (SD)	29.6 (21.0)	1.88 (1.82)
Median [Min, Max]	21.7 [0.408, 111]	1.24 [0.000388, 22.8]
<b>CPU3</b>		
Mean (SD)	42.1 (23.4)	1.91 (1.83)
Median [Min, Max]	39.9 [0.482, 111]	1.27 [0.000432, 22.8]
<b>CPU4</b>		
Mean (SD)	56.1 (19.9)	1.94 (1.84)
Median [Min, Max]	50.1 [23.2, 111]	1.30 [0.000480, 22.9]

```
## Warning in table1.formula(~CPU1 + CPU2 + CPU3 + CPU4 | Status * Vm, data =
## data.df, : Terms to the right of '|' in formula 'x' define table columns and are
## expected to be factors with meaningful labels.

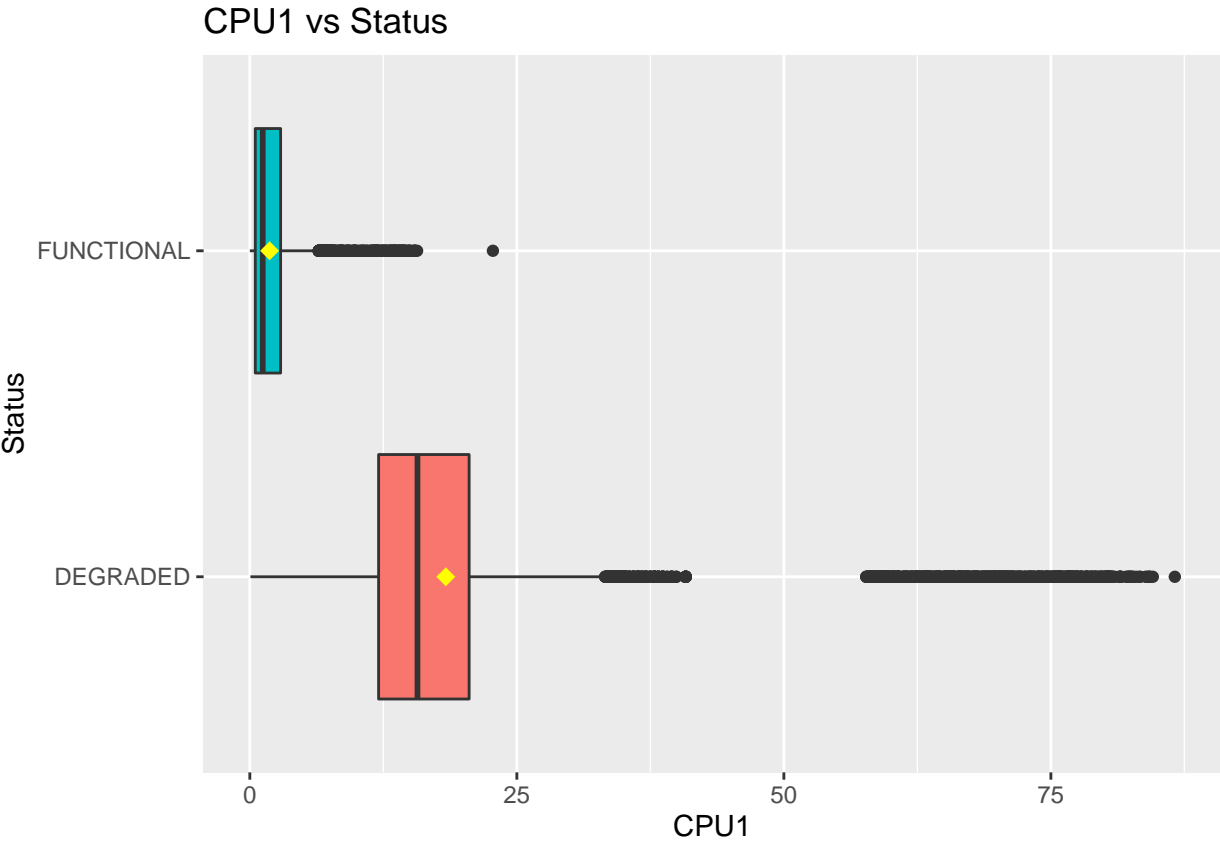
## Warning in .table1.internal(x = x, labels = labels, groupspan = groupspan, :
## Table has 16 columns. Are you sure this is what you want?
```

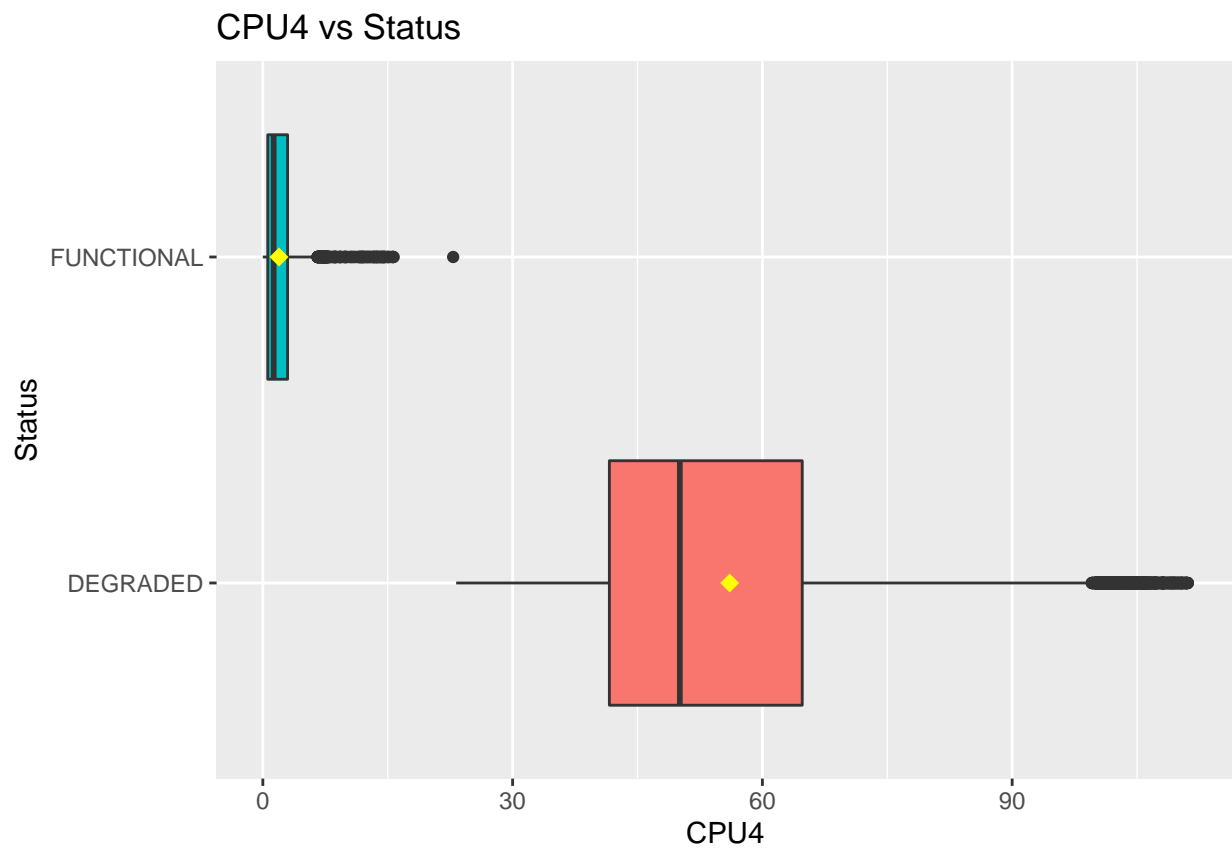
	DEGRADED					
	0	1	2	3	4	5
	(N=2354)	(N=361)	(N=2133)	(N=1708)	(N=2175)	(N=2175)
<b>CPU1</b>						
Mean (SD)	19.5 (11.9)	19.1 (17.2)	18.5 (11.5)	16.1 (11.6)	18.7 (12.6)	19.5 (11.9)
Median [Min, Max]	17.6 [0.313, 84.5]	13.4 [1.76, 75.6]	15.7 [2.27, 82.4]	13.8 [0.0554, 83.3]	15.1 [0.412, 86.6]	17.6 [0.313, 84.5]
<b>CPU2</b>						
Mean (SD)	30.8 (20.7)	30.1 (22.8)	30.0 (20.8)	27.6 (21.2)	29.4 (20.8)	30.8 (20.7)
Median [Min, Max]	24.0 [1.41, 110]	19.9 [1.96, 104]	22.1 [2.50, 109]	20.0 [1.46, 110]	21.1 [0.434, 111]	24.0 [1.41, 110]
<b>CPU3</b>						
Mean (SD)	43.2 (23.0)	43.2 (24.5)	41.9 (22.9)	40.4 (23.9)	41.9 (23.4)	43.2 (23.0)
Median [Min, Max]	41.1 [4.96, 111]	39.2 [2.17, 104]	39.9 [2.74, 111]	38.4 [2.34, 110]	39.2 [0.482, 111]	41.1 [4.96, 111]
<b>CPU4</b>						
Mean (SD)	56.8 (19.6)	56.8 (21.3)	55.7 (19.1)	54.9 (20.3)	56.1 (20.1)	56.8 (19.6)
Median [Min, Max]	51.0 [23.5, 111]	50.7 [25.6, 110]	50.1 [24.3, 111]	48.5 [23.5, 111]	49.8 [25.1, 111]	51.0 [23.5, 111]

	DEGRADED	FUNCTIONAL
	(N=14999)	(N=16000)
<b>VMs</b>		
0	2354 (15.7%)	2462 (15.4%)
1	361 (2.4%)	333 (2.1%)
2	2133 (14.2%)	1307 (8.2%)
3	1708 (11.4%)	2922 (18.3%)
4	2175 (14.5%)	2112 (13.2%)
5	1917 (12.8%)	2635 (16.5%)
6	2036 (13.6%)	2731 (17.1%)
7	2315 (15.4%)	1498 (9.4%)

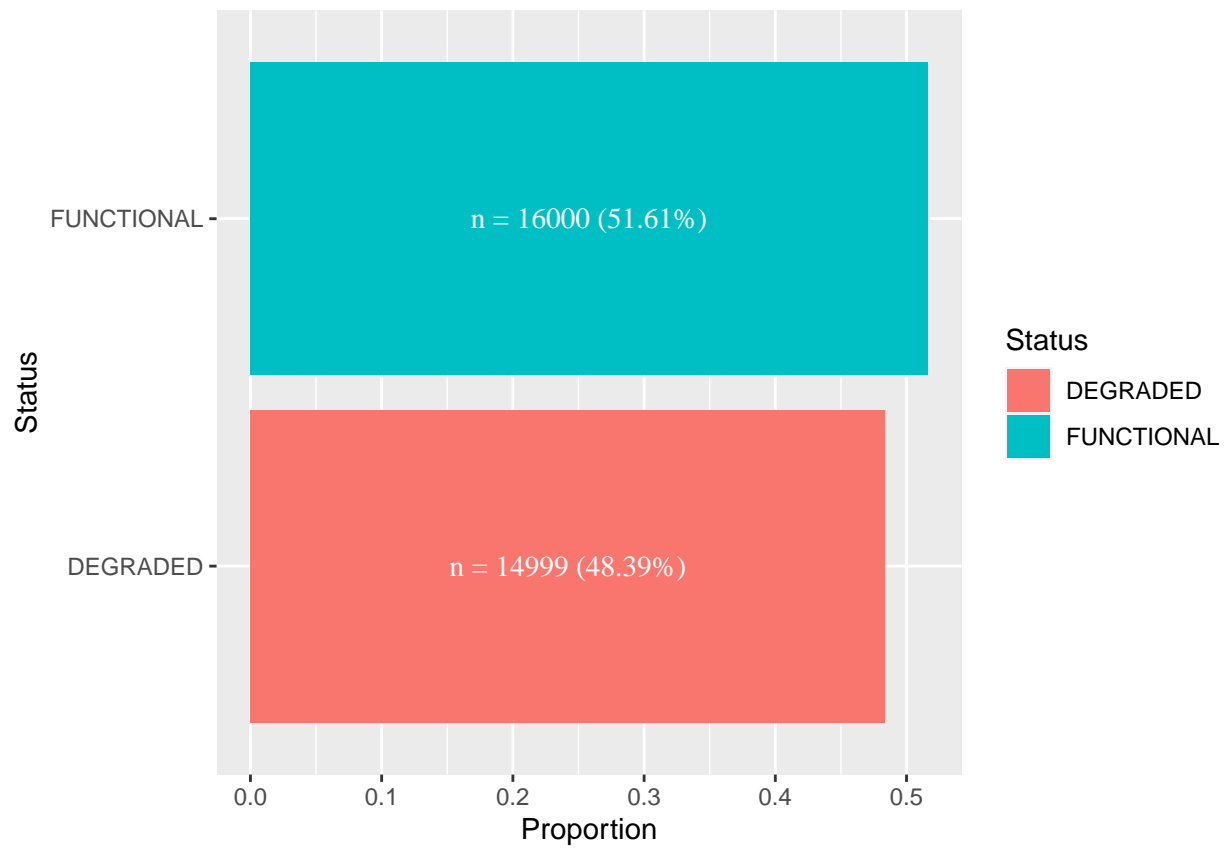
```
## # A tibble: 2 x 2
##   Status      n
##   <chr>    <int>
## 1 DEGRADED 14999
## 2 FUNCTIONAL 16000

## # A tibble: 2 x 5
##   Status      sample.size mean.CPU1.score median.CPU1.score sd.CPU1.score
##   <chr>          <int>          <dbl>          <dbl>          <dbl>
## 1 DEGRADED      14999          18.4          15.7          12.1
## 2 FUNCTIONAL    16000           1.85          1.21          1.81
```





```
## # A tibble: 2 x 4
##   Status      n Proportion Percentage
##   <chr>    <int>      <dbl>      <dbl>
## 1 DEGRADED 14999    0.484      48.4
## 2 FUNCTIONAL 16000    0.516      51.6
```



```
## List of 1
## $ legend.position: chr "none"
## - attr(*, "class")= chr [1:2] "theme" "gg"
## - attr(*, "complete")= logi FALSE
## - attr(*, "validate")= logi TRUE
```