Universidade Estadual de Campinas
Instituto de Matemática, Estatística e Computação Científica
Departamento de Estatística

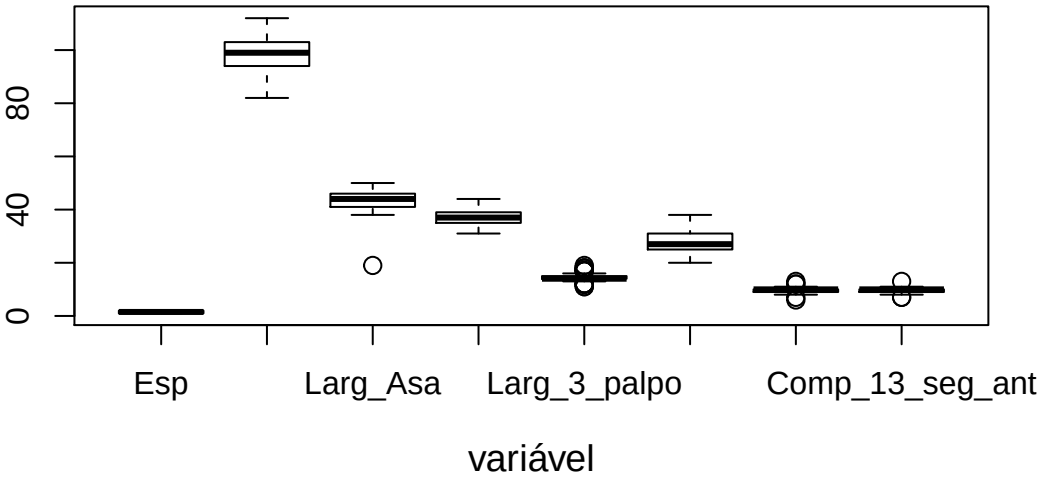
Trabalho - Parte 1
Relatório - Questão 2

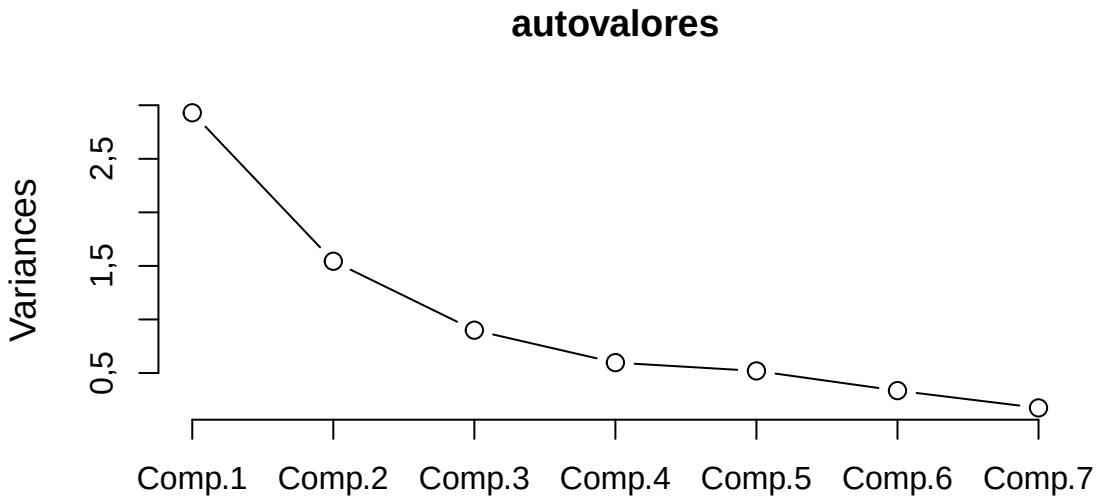
Eliane Ramos de Siqueira RA:155233
Guilherme Pazian RA:160323
Henrique Capatto RA:146406
Murilo Salgado Razoli RA:150987

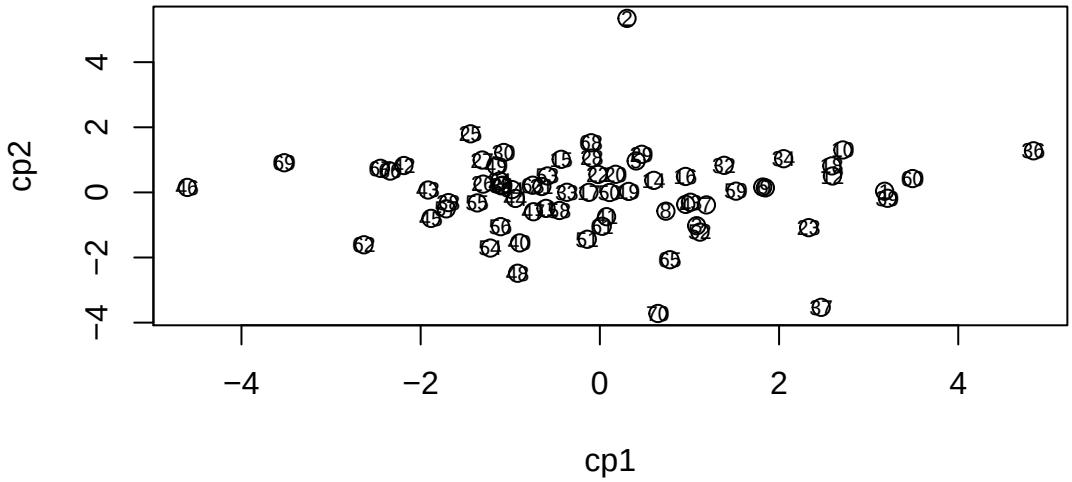
Disciplina: **ME731 - Análise Multivariada**
Professor: **Caio Lucidius Naberezny Azevedo**

Campinas - SP
18 de Novembro de 2017

```
##   ggplot2     knitr     dplyr tidyverse    xtable gridExtra  devtools
##      TRUE      TRUE      TRUE      TRUE      TRUE      TRUE      TRUE
##  magrittr     tidyr tidyverse
##      TRUE      TRUE      TRUE
```







1. Introdução

2. Análise descritiva

```
## % latex table generated in R 3.4.2 by xtable 1.8-2 package
## % Wed Nov 08 19:05:43 2017
## \begin{table}[ht]
## \centering
## \begin{tabular}{rrrrrrrr}
##   \hline
##  & Comp\_Asa & Larg\_Asa & Comp\_3\_palpo & Larg\_3\_palpo & Comp\_4\_palpo & Comp\_12\_seg\_ant & Comp\
##   \hline
## MÃ©dia & 97,90 & 43,33 & 37,34 & 14,59 & 27,81 & 9,61 & 9,54 \\
##   Var. & 37,60 & 16,57 & 10,29 & 3,00 & 18,41 & 1,20 & 1,00 \\
##   DP & 6,13 & 4,07 & 3,21 & 1,73 & 4,29 & 1,09 & 1,00 \\
##   CV(\%) & 6,26 & 9,39 & 8,59 & 11,88 & 15,43 & 11,38 & 10,51 \\
##   MÃnimo & 82,00 & 19,00 & 31,00 & 11,00 & 20,00 & 6,00 & 7,00 \\
##   Mediana & 99,00 & 44,00 & 37,00 & 14,00 & 27,00 & 10,00 & 10,00 \\
##   MÃ¡ximo & 112,00 & 50,00 & 44,00 & 19,00 & 38,00 & 13,00 & 13,00 \\
##    \hline
## \end{tabular}
## \end{table}
```

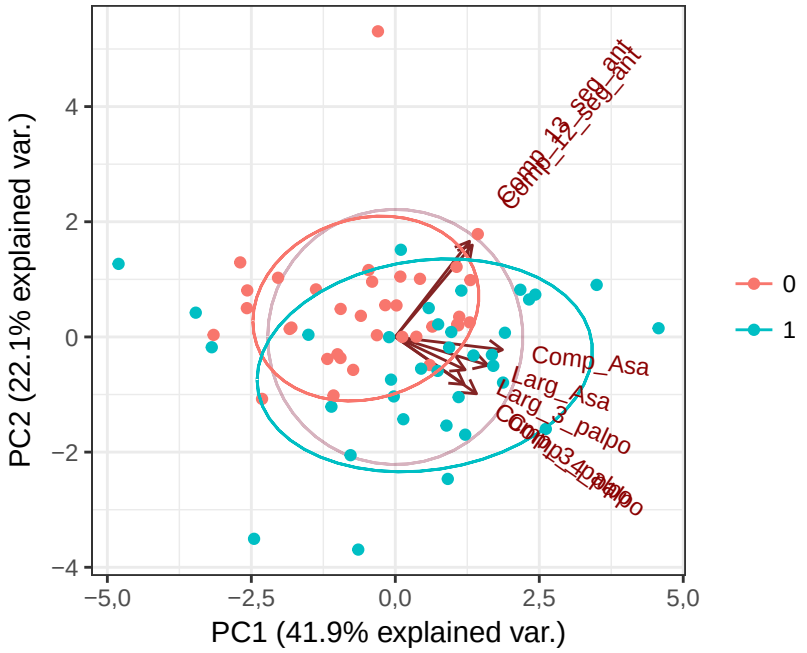
```
## $stats
##      [,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8]
## [1,]  1,0   82   38   31   13   20    8    8
## [2,]  1,0   94   41   35   14   25    9    9
## [3,]  1,5   99   44   37   14   27   10   10
## [4,]  2,0  103   46   39   15   31   10   10
## [5,]  2,0  112   50   44   16   38   11   11
##
## $n
## [1] 70 70 70 70 70 70 70 70
##
## $conf
##          [,1]      [,2]     [,3]     [,4]     [,5]     [,6]      [,7]
## [1,] 1,311154  97,30038 43,05577 36,24462 13,81115 25,86692  9,811154
## [2,] 1,688846 100,69962 44,94423 37,75538 14,18885 28,13308 10,188846
##           [,8]
## [1,]  9,811154
## [2,] 10,188846
##
## $out
##  [1] 19 17 12 17 11 17 17 18 18 12 18 12 11 12 18 19 12 17 12 17 13  6 12
## [24] 12  7 13  7  7
##
## $group
##  [1] 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 7 7 7 7 7 8 8 8
##
## $names
## [1] "Esp"             "Comp_Asa"        "Larg_Asa"        "Comp_3_palpo"
## [5] "Larg_3_palpo"    "Comp_4_palpo"    "Comp_12_seg_ant" "Comp_13_seg_ant"
```

3. Análise Inferencial

```
## Importance of components:
##                           Comp.1    Comp.2    Comp.3     Comp.4     Comp.5
## Standard deviation     1,7116366 1,2424549 0,9487536 0,77266752 0,72078630
## Proportion of Variance 0,4185286 0,2205277 0,1285905 0,08528787 0,07421898
## Cumulative Proportion  0,4185286 0,6390563 0,7676468 0,85293466 0,92715364
##                           Comp.6     Comp.7
## Standard deviation     0,5792105 0,41765975
## Proportion of Variance 0,0479264 0,02491995
## Cumulative Proportion  0,9750800 1,00000000
```

```
## NULL
```

```
## NULL
```



4. Conclusões

5. Bibliografia