Title of the semester project

true true true

May 18, 2021

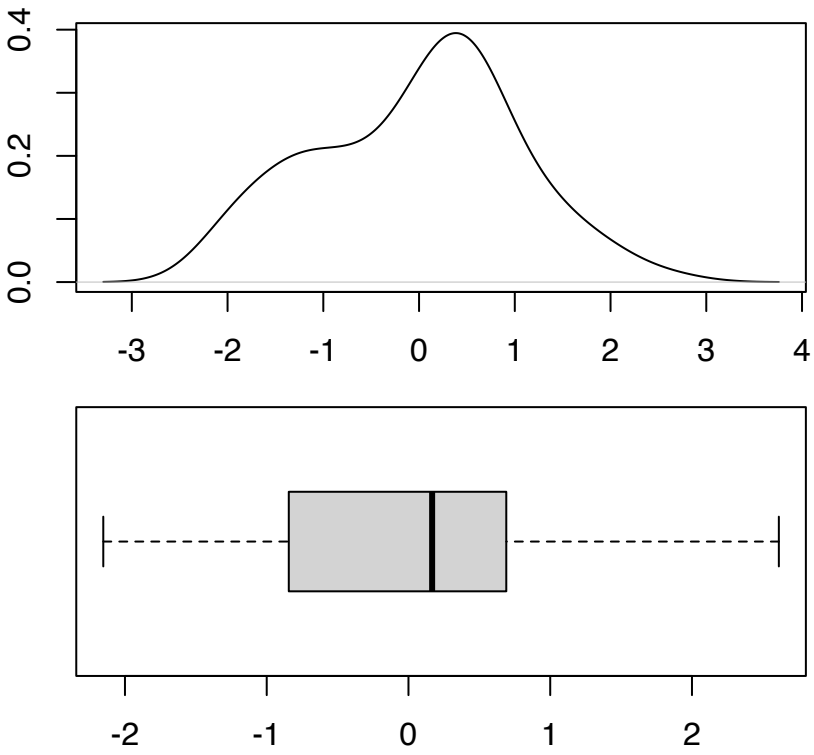
RMarkdown basics

This is a citations: Efron (1992).

This is a displayed but not evaluated `R` code chunk

```
print("I love R")
```

This is an `R` code chunk, not displayed but evaluated.



This is an inline `R` code: Hence, the mean of the data is of -0.0247732.

This is a LaTeX equation

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} \mathrm{e}^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2}$$

This is a inline LaTeX equation: $\frac{1}{n}\sum_{i=1}^{n} a_i = \frac{a_1+a_2+\cdots+a_n}{n}$

Introduction

La moyenne vaut -0.02

Analysis

Description of the task

Motivation

Results: description and interpretation

Parameters

SAMPLESEED <- 9886 SIMULATIONSEED <- 1021 n <- 500 muX <- 0 muY <- 1 sX <- 1.8 sY <- 0.5 rho <- 0.44 out <- 0.07 dev <- 3 angle <-0

Generate data, nonlinear setting

n <- 500 set.seed(SAMPLESEED) df <- gen_nonlinear(n=n, muX=muX, muY=muY, sX=sX, sY=sY, angle=pi) # population correlation in this setting rho <- cor_nonlinear(muX=muX, muY=muY, sX=sX, sY=sY, angle=angle) plot(df, main=paste("Population correlation =", round(rho, 3)))

Were these results expected: discussion

Statistical methods used

Acquired skills during the term project

Additional element

Conclusion

Efron, Bradley. 1992. "Bootstrap Methods: Another Look at the Jackknife." In *Breakthroughs in Statistics*, 569–93. Springer.