

STA490

In-hospital blood glucose monitoring — A retrospective analysis of the year 2014.

Analysis for
Dr. Lia Bally
Dr. Alexander Leichtle
(University Hospital Bern)

Verena Steffen (steffen.verena@gmail.com)
Version of May 31, 2016

1 Research Questions

1. Sans serif: Arial

2. Serif: Palatino

3. See LATEX Font Catalogue at http://www.tug.dk/FontCatalogue

2 Data

Table 1 gives a short overview of iris dataset, using the function tableContinuous from the package reporttools. The package also contains functions for nominal and date variables.

Variable	n	Min	q_1	η	μ	q_3	Max	σ
Sepal.Length	150	4.30	5.10	5.80	5.84	6.40	7.90	0.83
Sepal.Width	150	2.00	2.80	3.00	3.06	3.30	4.40	0.44
Petal.Length	150	1.00	1.60	4.35	3.76	5.10	6.90	1.77
Petal.Width	150	0.10	0.30	1.30	1.20	1.80	2.50	0.76

Table 1: Descriptive statistics of iris data.

In Figure 1 we show a pairs plot of the Iris data

3 Methods

Statistical Methods In this report we use [1]. In what follows there is some dummy text in latin. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adi- piscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus

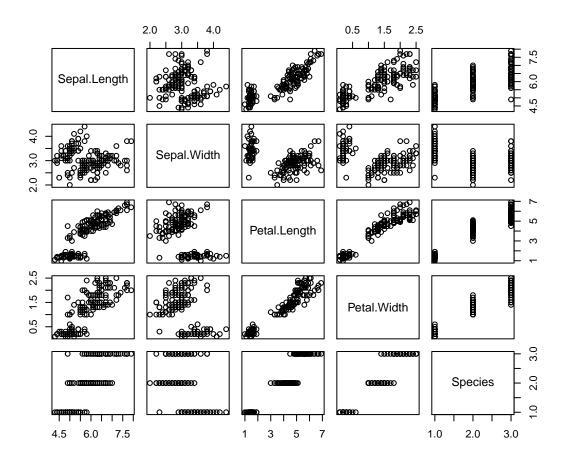


Figure 1: Pairs plot for iris data.

rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapi- en est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Sus- pendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Software All analysis was performed in the R programming language [1].

4 Analysis

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper

elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultri- cies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringil- la, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetuer.

Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean fau- cibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum faucibus, egestas vel, odio.

	Coefficient	95% confidence interval	<i>p</i> -value
Intercept	2.17	from 1.62 to 2.72	< 0.0001
Sepal.Width	0.50	from 0.33 to 0.67	< 0.0001
Petal.Length	0.83	from 0.69 to 0.96	< 0.0001
Petal.Width	-0.32	from -0.61 to -0.02	0.039
Speciesversicolor	-0.72	from -1.20 to -0.25	0.003
Speciesvirginica	-1.02	from -1.68 to -0.36	0.003

Table 2: Linear regression model choosing some columns.

	Coefficient	95%-confidence interval	p-value
Intercept	6.53	from 5.58 to 7.47	< 0.0001
Width Sepal	-0.22	from -0.53 to 0.08	0.15

Table 3: Linear regression model with adapted row names.

References

[1] R Core Team. R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria, 2016.

R version and packages used to generate this report:

R version: R version 3.2.1 (2015-06-18)

Base packages: stats, graphics, grDevices, utils, datasets, methods, base

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.10	3.50	1.40	0.20	setosa
4.90	3.00	1.40	0.20	setosa
4.70	3.20	1.30	0.20	setosa
4.60	3.10	1.50	0.20	setosa
5.00	3.60	1.40	0.20	setosa
5.40	3.90	1.70	0.40	setosa

Table 4: First six records of the iris dataset.

Species	Petal.Width; 1.5			
	FALSE	TRUE		
setosa	0	50		
versicolor	15	35		
virginica	49	1		

Table 5: Contingency table for iris data.

Other packages: Iqmm, Ime4, Matrix, dplyr, plyr, ggplot2, lattice, RColorBrewer, biostatUZH, survival, reporttools, xtable, knitr

This document was generated on May 31, 2016 at 14:18.