2.01.2019

CENG484 - Data Mining

Assignment 2

Deadline: 14.01.2019, 09:00

In this assignment, you will work on a data set to analyze "**Bone Mineral Density**".
Your dataset includes "Relative spinal bone mineral density measurements on North American adolescents". Each value is the difference in spnbmd taken on two consecutive visits, divided by the average. The age is the average age over the two visits.

Variables in data set:

idnum:	identifies the child, and hence the repeat measurements
age:	average age of child when measurements were taken
gender:	male or female
spnbmd:	Relative Spinal bone mineral density measurement

You can reach the related data set from bone.data file.

1) We would like to see the bone density and age and/or gender relations after your analysis on **bone.data** file.
2) As a Larger dataset spnbmd.csv includes ethnicity information. If you can add ethnicity feature to yours analyze you will have additionally 20 points as bonus.

To answer these questions; you can use different models and tools, please explain why you choose them?

Please realize your project with R, and prepare a report to analyze and explain your all outcomes.

Please upload your R code and your analysis report to CMS until Jan. 14th, 2019 09:00. You should upload a zip file, and file name "Student Number-Name-02.zip".

You can access related info and data files from:

https://web.stanford.edu/~hastie/ElemStatLearn/

Thank you.