# Statistik un Data Science für die Informatik

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## Übungsblatt 1

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Since the bootstrapping method is implemented in such a way that it generates samples in a random manner, the results of the standard error and standard deviation of the bootstrapped medians vary slightly but generally lie in the range 54000 and 70000. The standard deviation The results of bootstrapping carried out by generating 1000 samples 80 items each with the confidence interval 95%, repeated 10 times:

Means of the lower and upper bounds of the confidence interval based on the bootstrapped median values:
lower bounds: 54889.0
upper bounds: 69745.0

Standard error of the lower and upper bounds of the confidence interval based on the bootstrapped median values:
lower bounds: 279.3345
upper bounds: 192.1371

It is of note that with the increasing number of generated samples the standard error goes to zero.