Report on learning practice # 1

Analysis of univariate random variables

Performed by:

(student name)

(group number)

Saint-Petersburg

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**Table of contents:**

1. Substantiation of chosen subsample;

2. Plotting a non-parametric estimation of PDF in form of a histogram and using kernel density function (or probability law in case of discrete RV)

3. Order statistics estimation and its representation as “box with whiskers” plot.

4. Selection of theoretical distributions that best reflect empirical data;

5. Estimation of random variable distribution parameters using maximum likelihood technique and LS methods.

6. Validation of empirical and theoretical distributions using quantile biplots.

7. Statistical tests (2 at least).

**Sourcecode**