Report on learning practice # 2

Analysis of multivariate random variables

Performed by:

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**Table of contents:**

1. Plotting a non-parametric estimation of PDF in form of a histogram and ernel density function for MRV (or probability law in case of discrete MRV).

2. Estimation of multivariate mathematical expectation and variance.

3. Non-parametric estimation of conditional distributions, mathematical expectations and variances.

4. Estimation of pair correlation coefficients, confidence intervals for them and significance levels.

5. Task formulation for regression, multivariate correlation.

6. Regression model,multicollinearity and regularization (if needed).

7. Quality analysis.

**Sourcecode**