

Supervisor's review of the bachelor thesis
Danil Alshaev:
**Problems of Maximum Likelihood
Estimates**

Danil Alshaev worked on the thesis quite independently and wrote a lot of material without my intervention. One of the consequences is that the thesis developed in somewhat different direction than I expected. In any case, it fulfilled its aim and assignment, contributing to a discussion of applicability of maximal likelihood estimates (MLE) in a specific field, which is chess rating.

The author has shown several drawbacks of MLE, as well as advantages, and suggestions for a better use. In particular, the simplification of computations by using an average of input data instead of individual items was tested. The conclusion is that this causes an error, which, however, is minor in usual situations. The discussion suggest scenarios in which this discrepancy could be important.

What I particularly like on the thesis is the choice of real-life examples. These form a collection of surprising events which shocked the chess world and here they are explained in statistical terms. This made reading of the thesis unusually exciting.

Danil Alshaev proved all expected skills of a graduate of our university and wrote a useful thesis which I can recommend for reading.

I evaluate the thesis by the grade

A (excellent).

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