

Title: Confidence intervals for parameters of multinomial distribution

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Abstract: Confidence intervals for parameters for binomial and multinomial distribution are described in this thesis. These intervals can be used in practice, for example- pre-election estimates. The first two chapters are devoted to derivation of these intervals. Simulations and comparison of several selected methods can be found in the last chapter. Based on the simulations, we consider it appropriate, to choose to calculate confidence intervals for parameters of multinomial distribution intervals based on Bonferroni's inequality, or their modifications. These intervals are easy to calculate, while their coverage probability is at least 0.89.

Keywords: confidence interval, multinomial distribution, binomial distribution, Bonferroni inequality