

Performance Comparison of Model Selection Criteria by Generated Experimental Data

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Keywords: Akaike information criterion (AIC), Bayesian information criterion (BIC), model selection, fitting methods.

In Bioinformatics and other area the model selection is a process of choosing a model from a set of candidate models of different classes which will provide the best balance between goodness of fit of the data and complexity of the model [1]. There are many criteria for evaluation of mathematical models for data fitting [2], [3].

The main objectives of this study are: (1) to fitting artificial experimental data with different models with increasing complexity; (2) to test whether two known criteria as Akaike’s information criterion (AIC) and Bayesian information criterion (BIC) can correctly identified the model used to generate the artificial data and (3) to assess and compare empirically the performance of AIC and BIC.

Acknowledgements. This work is partially supported by the project of the Bulgarian National Science Fund, entitled: Bioinformatics research: protein folding, docking and prediction of biological activity, NSF I02 /16 12.12.14.

References

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