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AR-Sieve Bootstrap Method and Its Application in Biological Time Series

The problem of estimating characteristics of time series is considered. The bootstrap procedure, introduced by Bühlmann (1997), based on the method of autoregressive process sieve is used. AR(p(n)) model is fitted to the observed data and a bootstrap sample is generated by resampling from the centered residuals. The autoregressive sieve bootstrap is alternative method to the approach based on asymptotic theory. The AR-sieve bootstrap method was applied to medical data: Heart Rate time series.

References

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