Genetic regulatory networks inference: modeling, parameters estimation & model validation

Fomekong Nanfack, Y.

Publication date
2010

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
Appendix A: System Biology Toolbox review

Toolboxes

Here we give a brief overview of the contents of well-known toolboxes. The information is based on the state of affairs in 2008. For up-to-date information we refer to the webpages.

MATLAB based

http://www.mathworks.com/


The toolboxes above do not contain regression analysis, but implementing the Fisher Information matrix, confidence intervals and the correlation matrix is easy in MATLAB. Moreover, the Statistics Toolbox of MATLAB provides nonlinear least squares fitting tools including regression analysis. The SimBiology Toolbox of MATLAB contains sensitivity analysis and parameter estimation. If the Optimization Toolbox(es) are installed they are used, otherwise only simplex search can be used for unconstrained problems.
Public domain toolboxes based on MATLAB


Stand-alone public domain toolboxes
