

Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science)

Wyatt Travis Clark

Download now

<u>Click here</u> if your download doesn"t start automatically

Information-Theoretic Evaluation for Computational **Biomedical Ontologies (SpringerBriefs in Computer Science)**

Wyatt Travis Clark

Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in **Computer Science**) Wyatt Travis Clark

The development of effective methods for the prediction of ontological annotations is an important goal in computational biology, yet evaluating their performance is difficult due to problems caused by the structure of biomedical ontologies and incomplete annotations of genes. This work proposes an information-theoretic framework to evaluate the performance of computational protein function prediction. A Bayesian network is used, structured according to the underlying ontology, to model the prior probability of a protein's function. The concepts of misinformation and remaining uncertainty are then defined, that can be seen as analogs of precision and recall. Finally, semantic distance is proposed as a single statistic for ranking classification models. The approach is evaluated by analyzing three protein function predictors of gene ontology terms. The work addresses several weaknesses of current metrics, and provides valuable insights into the performance of protein function prediction tools.



Download Information-Theoretic Evaluation for Computational ...pdf



Read Online Information-Theoretic Evaluation for Computation ...pdf

Download and Read Free Online Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) Wyatt Travis Clark

From reader reviews:

Beth Stewart:

The knowledge that you get from Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) may be the more deep you excavating the information that hide within the words the more you get serious about reading it. It doesn't mean that this book is hard to know but Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) giving you buzz feeling of reading. The article author conveys their point in specific way that can be understood by anyone who read this because the author of this reserve is well-known enough. This particular book also makes your current vocabulary increase well. So it is easy to understand then can go along with you, both in printed or e-book style are available. We highly recommend you for having that Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) instantly.

Jonathan Ownby:

Reading can called imagination hangout, why? Because when you are reading a book especially book entitled Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) your brain will drift away trough every dimension, wandering in most aspect that maybe unidentified for but surely can be your mind friends. Imaging each and every word written in a book then become one form conclusion and explanation this maybe you never get prior to. The Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) giving you one more experience more than blown away your brain but also giving you useful information for your better life within this era. So now let us present to you the relaxing pattern at this point is your body and mind will likely be pleased when you are finished studying it, like winning a sport. Do you want to try this extraordinary shelling out spare time activity?

Marco Manuel:

This Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) is brand new way for you who has attention to look for some information because it relief your hunger associated with. Getting deeper you into it getting knowledge more you know otherwise you who still having little bit of digest in reading this Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) can be the light food for you personally because the information inside this specific book is easy to get by means of anyone. These books build itself in the form and that is reachable by anyone, yes I mean in the e-book web form. People who think that in guide form make them feel sleepy even dizzy this guide is the answer. So there is no in reading a publication especially this one. You can find actually looking for. It should be here for an individual. So , don't miss that! Just read this e-book style for your better life along with knowledge.

Marylou Beauregard:

Reading a publication make you to get more knowledge from it. You can take knowledge and information from the book. Book is published or printed or illustrated from each source which filled update of news. In this particular modern era like now, many ways to get information are available for an individual. From media social similar to newspaper, magazines, science publication, encyclopedia, reference book, new and comic. You can add your understanding by that book. Are you hip to spend your spare time to open your book? Or just trying to find the Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) when you necessary it?

Download and Read Online Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) Wyatt Travis Clark #D5X9C67SEJA

Read Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) by Wyatt Travis Clark for online ebook

Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) by Wyatt Travis Clark Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) by Wyatt Travis Clark books to read online.

Online Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) by Wyatt Travis Clark ebook PDF download

Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) by Wyatt Travis Clark Doc

Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) by Wyatt Travis Clark Mobipocket

Information-Theoretic Evaluation for Computational Biomedical Ontologies (SpringerBriefs in Computer Science) by Wyatt Travis Clark EPub