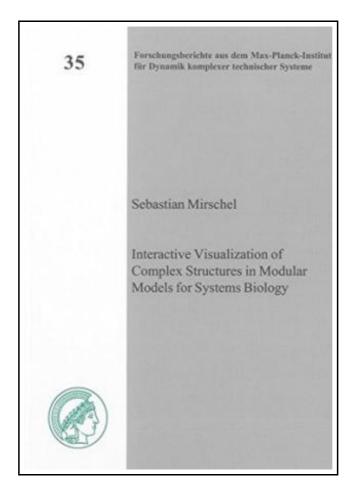
# Interactive Visualization of Complex Structures in Modular Models for Systems Biology



Filesize: 4 MB

### Reviews

This type of publication is every thing and helped me seeking ahead and much more. It usually fails to charge too much. It is extremely difficult to leave it before concluding, once you begin to read the book.

(Juliet Mertz)

# INTERACTIVE VISUALIZATION OF COMPLEX STRUCTURES IN MODULAR MODELS FOR SYSTEMS BIOLOGY



Shaker Verlag Sep 2012, 2012. Buch. Book Condition: Neu. 208x146x17 mm. Neuware - In recent years, the modeling of reaction systems has tended to become more complex. Especially in systems biology researchers are faced with network models growing in size, complexity and scope that become hard to understand and navigate. The hierarchical and modular decomposition of such models (which results in modular models) and their consequent visualization can help to manage and understand them. In particular, visual representations allow researchers to access, integrate and analyze complex biochemical information, and thus support the process of decision making. This thesis exploits existing and contributes novel visualization and exploration techniques that can be used to support the modeling process of intracellular signaling systems. As stated in the following, several aspects are discussed. In close cooperation with modelers, formalized visual representations for dynamic and logical models have been speci ed. For each modeling approach a symbol set and speci c visualization rules are provided. They are applied to the modular and hierarchical structures of complex signaling models and aimed at visualizing them in a biologically intuitive manner, but also at maintaining their systematic approach. For convenient use, not only a visual representation of the model is crucial; a graphical network needs to be combined with exploration techniques. Hence, a zoomable visual interface for modular models has been developed to support highly interactive tasks such as navigation through complex structures and exploratory analysis. Hereby, interactive techniques, semantic zooming as well as content-aware navigation are used and combined in order to integrate focus and contextual information, and e ciently navigate and explore the modular model. Although formalized representations are necessary, they are not always the best way to graphically depict knowledge. In many cases, visual representations have to be tailored to a speci c modeling task,...

- Read Interactive Visualization of Complex Structures in Modular Models for Systems Biology Online
- Download PDF Interactive Visualization of Complex Structures in Modular Models for Systems Biology

### **Relevant Books**



#### Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

Save Document »



#### Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

Save Document »



#### The Java Tutorial (3rd Edition)

Pearson Education, 2001. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Praise for "The Java' Tutorial, Second Edition" includes: "This book...

Save Document »



## Kingfisher Readers: What Animals Eat (Level 2: Beginning to Read Alone) (Unabridged)

Pan Macmillan. Paperback. Book Condition: new. BRAND NEW, Kingfisher Readers: What Animals Eat (Level 2: Beginning to Read Alone) (Unabridged), Brenda Stone, For the first time, Kingfisher brings its expertise in beautifully-designed, trusted non-fiction to...

Save Document »



#### Kingfisher Readers: Where Animals Live (Level 2: Beginning to Read Alone)

Pan Macmillan. Paperback. Book Condition: new. BRAND NEW, Kingfisher Readers: Where Animals Live (Level 2: Beginning to Read Alone), Brenda Stone, For the first time, Kingfisher brings its expertise in beautifully-designed, trusted non-fiction to the...

Save Document »