



BayesiaLab User Guide

BayesiaLab is a comprehensive tool for creating and utilizing Bayesian networks. With BayesiaLab, you can define, learn, edit, and analyze Bayesian network models.

The BayesiaLab User Guide describes the functionalities and the user interface of BayesiaLab.

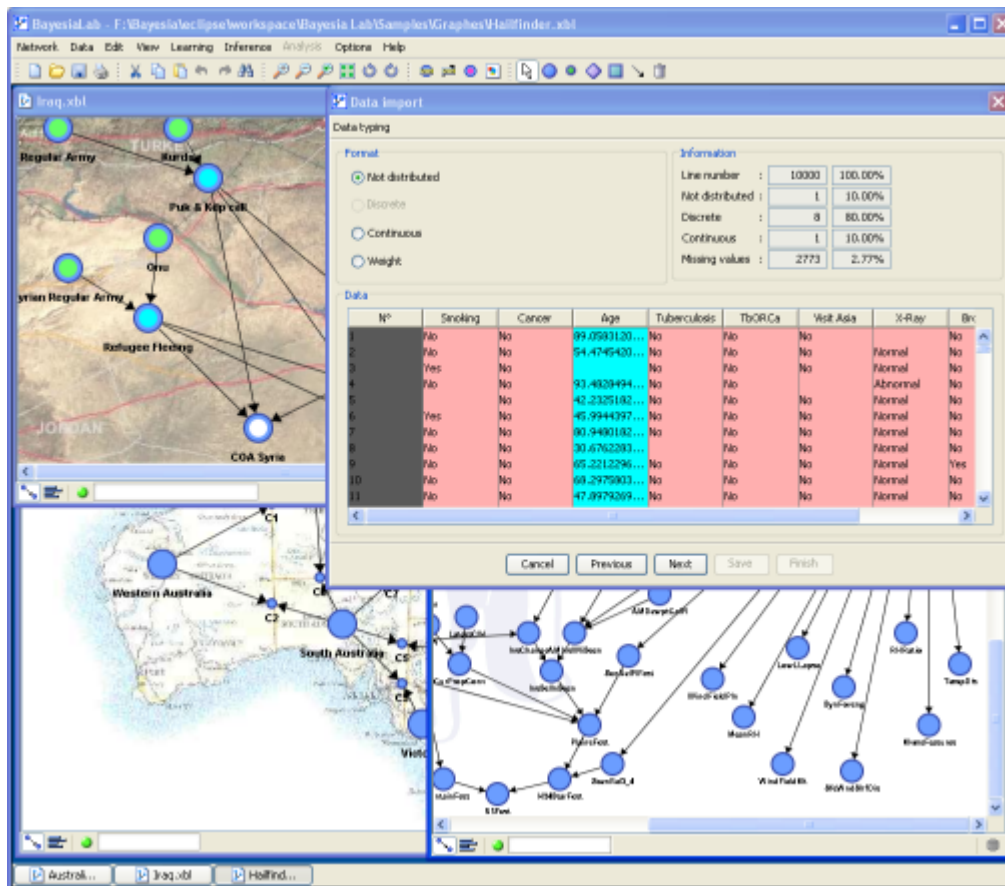
BayesiaLab's Help Functions

While BayesiaLab is running, you can always press  to bring up the help files. Alternatively, pressing  displays the contextual help cursor. Once it's active, you can click on any component, including menus and submenus, to display the context-specific help pages.

Introduction

Bayesian networks are graphical structures, consisting of nodes and arcs. Nodes represent random variables, arcs represent direct probabilistic relationships between the connected nodes/variables. These probabilistic relationships are quantified by probability distributions. Such probability distributions are recorded in conditional probability tables that are associated with each node.

Bayesian networks can be machine-learned from data or, alternatively, they can be manually modeled by domain experts. Once a Bayesian network is created, it can be used for updating the probability distribution of each variable, given any evidence set on other variables in the network.



The screenshot displays the BayesiaLab software interface. The main window shows a Bayesian network diagram with nodes and directed arcs. A 'Data Import' dialog box is open, showing the 'Data' tab with a table of data. The table has columns for 'N°', 'Smoking', 'Cancer', 'Age', 'Tuberculosis', 'TbORCa', 'Visit Asia', 'X-Ray', and 'Br'. The data is as follows:

N°	Smoking	Cancer	Age	Tuberculosis	TbORCa	Visit Asia	X-Ray	Br
1	No	No	99.0583120...	No	No	No	Normal	No
2	No	No	54.4745420...	No	No	No	Abnormal	No
3	Yes	No	42.2325182...	No	No	No	Abnormal	No
4	No	No	93.4829494...	No	No	No	Abnormal	No
5	No	No	42.2325182...	No	No	No	Abnormal	No
6	Yes	No	45.9944397...	No	No	No	Abnormal	No
7	No	No	90.9480182...	No	No	No	Abnormal	No
8	No	No	30.6762383...	No	No	No	Abnormal	No
9	No	No	65.2212296...	No	No	No	Abnormal	Yes
10	No	No	68.2975803...	No	No	No	Abnormal	No
11	No	No	47.8974269...	No	No	No	Abnormal	No