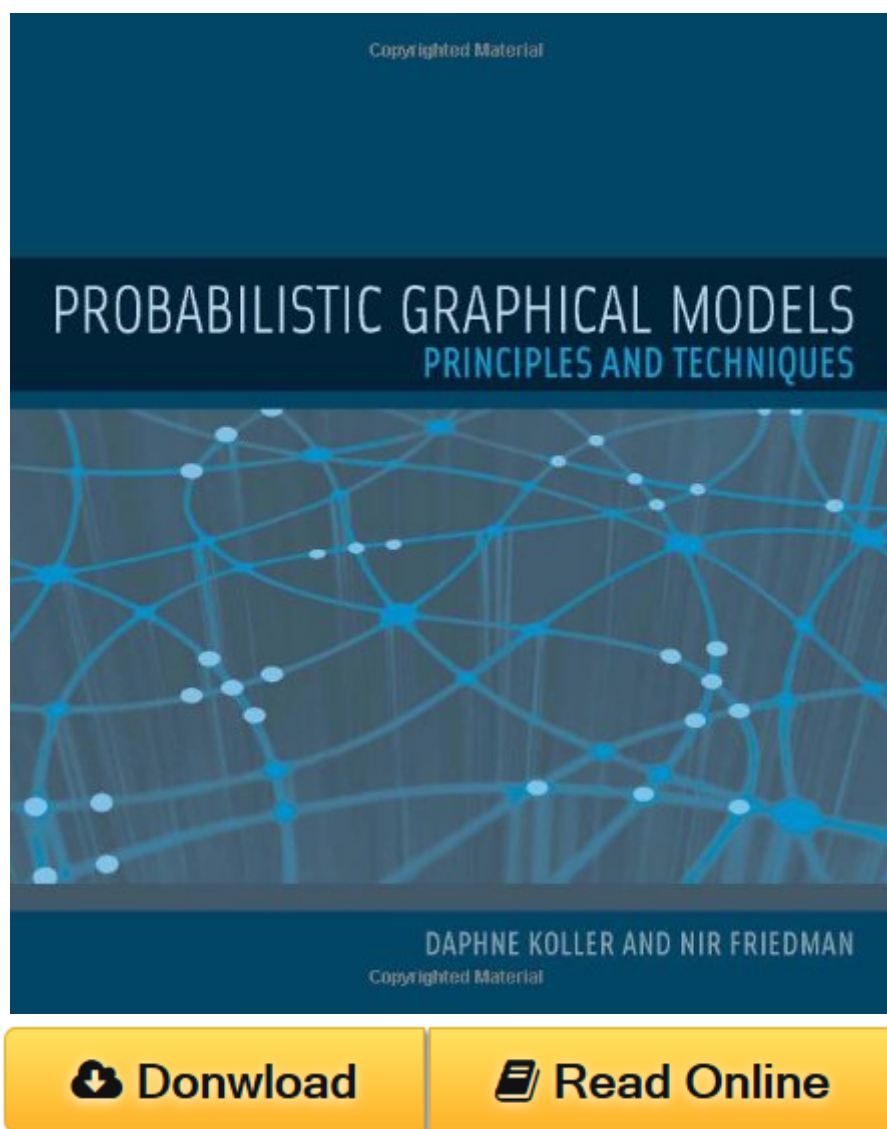


# Probabilistic Graphical Models: Principles and Techniques (Adaptive Computation and Machine Learning series) PDF



Probabilistic Graphical Models: Principles and Techniques (Adaptive Computation and Machine Learning series) by Daphne Koller, Nir Friedman ISBN 0262013193

Most tasks require a person or an automated system to reason -- to reach conclusions based on available information. The framework of probabilistic graphical models, presented in this book, provides a general approach for this task. The approach is model-based, allowing interpretable models to be constructed and then manipulated by reasoning algorithms. These models can also be learned automatically from data, allowing the approach to be used in cases where manually constructing a model is difficult or even impossible. Because uncertainty is an inescapable aspect

of most real-world applications, the book focuses on probabilistic models, which make the uncertainty explicit and provide models that are more faithful to reality.

*Probabilistic Graphical Models* discusses a variety of models, spanning Bayesian networks, undirected Markov networks, discrete and continuous models, and extensions to deal with dynamical systems and relational data. For each class of models, the text describes the three fundamental cornerstones: representation, inference, and learning, presenting both basic concepts and advanced techniques. Finally, the book considers the use of the proposed framework for causal reasoning and decision making under uncertainty. The main text in each chapter provides the detailed technical development of the key ideas. Most chapters also include boxes with additional material: skill boxes, which describe techniques; case study boxes, which discuss empirical cases related to the approach described in the text, including applications in computer vision, robotics, natural language understanding, and computational biology; and concept boxes, which present significant concepts drawn from the material in the chapter. Instructors (and readers) can group chapters in various combinations, from core topics to more technically advanced material, to suit their particular needs.

## **Probabilistic Graphical Models: Principles and Techniques (Adaptive Computation and Machine Learning series) Review**

This Probabilistic Graphical Models: Principles and Techniques (Adaptive Computation and Machine Learning series) book is not really ordinary book, you have it then the world is in your hands. The benefit you get by reading this book is actually information inside this reserve incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This kind of Probabilistic Graphical Models: Principles and Techniques (Adaptive Computation and Machine Learning series) without we recognize teach the one who looking at it become critical in imagining and analyzing. Don't be worry Probabilistic Graphical Models: Principles and Techniques (Adaptive Computation and Machine Learning series) can bring any time you are and not make your tote space or bookshelves' grow to be full because you can have it inside your lovely laptop even cell phone. This Probabilistic Graphical Models: Principles and Techniques (Adaptive Computation and Machine Learning series) having great arrangement in word and layout, so you will not really feel uninterested in reading.