

Acknowledgments

This book owes a considerable debt of gratitude to the many people who contributed to its creation, and to those who have influenced our work and our thinking over the years.

First and foremost, we want to thank our students, who, by asking the right questions, and forcing us to formulate clear and precise answers, were directly responsible for the inception of this book and for any clarity of presentation.

We have been fortunate to share the same mentors, who have had a significant impact on our development as researchers and as teachers: Joe Halpern, Stuart Russell. Much of our core views on probabilistic models have been influenced by Judea Pearl. Judea through his persuasive writing and vivid presentations inspired us, and many other researchers of our generation, to plunge into research in this field.

There are many people whose conversations with us have helped us in thinking through some of the more difficult concepts in the book: Nando de Freitas, Gal Elidan, Dan Geiger, Amir Globerson, Uri Lerner, Chris Meek, David Sontag, Yair Weiss, and Ramin Zabih. Others, in conversations and collaborations over the year, have also influenced our thinking and the presentation of the material: Pieter Abbeel, Jeff Bilmes, Craig Boutilier, Moises Goldszmidt, Carlos Guestrin, David Heckerman, Eric Horvitz, Tommi Jaakkola, Michael Jordan, Kevin Murphy, Andrew Ng, Ben Taskar, and Sebastian Thrun.

We especially want to acknowledge Gal Elidan for constant encouragement, valuable feedback, and logistic support at many critical junctions, throughout the long years of writing this book.

Over the course of the years of work on this book, many people have contributed to it by providing insights, engaging in enlightening discussions, and giving valuable feedback. It is impossible to individually acknowledge all of the people who made such contributions. However, we specifically wish to express our gratitude to those people who read large parts of the book and gave detailed feedback: Rahul Biswas, James Cussens, James Diebel, Yoni Donner, Tal El-Hay, Gal Elidan, Stanislav Funiak, Amir Globerson, Russ Greiner, Carlos Guestrin, Tim Heilman, Jeremy Heitz, Maureen Hillenmeyer, Ariel Jaimovich, Tommy Kaplan, Jonathan Laserson, Ken Levine, Brian Milch, Kevin Murphy, Ben Packer, Ronald Parr, Dana Pe'er, and Christian Shelton.

We are deeply grateful to the following people, who contributed specific text and/or figures, mostly to the case studies and concept boxes without which this book would be far less interesting: Gal Elidan, to chapter 11, chapter 18, and chapter 19; Stephen Gould, to chapter 4 and chapter 13; Vladimir Jovic, to chapter 12; Jonathan Laserson, to chapter 19; Uri Lerner, to chapter 14; Andrew McCallum and Charles Sutton, to chapter 4; Brian Milch, to chapter 6; Kevin

Murphy, to chapter 15; and Benjamin Packer, to many of the exercises used throughout the book. In addition, we are very grateful to Amir Globerson, David Sontag and Yair Weiss whose insights on chapter 13 played a key role in the development of the material in that chapter.

Special thanks are due to Bob Prior at MIT Press who convinced us to go ahead with this project and was constantly supportive, enthusiastic and patient in the face of the recurring delays and missed deadlines. We thank Greg McNamee, our copy editor, and Mary Reilly, our artist, for their help in improving this book considerably. We thank Chris Manning, for allowing us to use his \LaTeX macros for typesetting this book, and for providing useful advice on how to use them. And we thank Miles Davis for invaluable technical support.

We also wish to thank the many colleagues who used drafts of this book in teaching provided enthusiastic feedback that encouraged us to continue this project at times where it seemed unending. Sebastian Thrun deserves a special note of thanks, for forcing us to set a deadline for completion of this book and to stick to it.

We also want to thank the past and present members of the DAGS group at Stanford, and the Computational Biology group at the Hebrew University, many of whom also contributed ideas, insights, and useful comments. We specifically want to thank them for bearing with us while we devoted far too much of our time to working on this book.

Finally, noone deserves our thanks more than our long-suffering families — Natalie Anna Koller Avida, Maya Rika Koller Avida, and Dan Avida; Lior, Roy, and Yael Friedman — for their continued love, support, and patience, as they watched us work evenings and weekends to complete this book. We could never have done this without you.