About This Book

Whether you're new to machine learning or just new to TensorFlow, this book will be your ultimate guide. You'll need working knowledge of object-oriented programming in Python to understand some of the code listings, but other than that, this book covers introductory machine learning from the basics.

ROADMAP

The book is divided into three parts:

- Part 1 starts by exploring what machine learning is and highlighting TensorFlow's crucial role. Chapter 1 introduces the terminology and theory of machine learning, and chapter 2 tells you everything you need to know to begin using TensorFlow.
- Part 2 covers fundamental algorithms that have withstood the test of time. Chapters 3– 6 discuss regression, classification, clustering, and hidden Markov models, respectively. You'll find these algorithms everywhere in the field of machine learning.
- Part 3 unveils the true power of TensorFlow: neural networks. Chapters 7–12 introduce you to autoencoders, reinforcement learning, convolutional neural networks, recurrent neural networks, sequence-to-sequence models, and utility, respectively.

Unless you're an experienced TensorFlow user with a fair amount of machine-learning experience under your belt, I highly recommend reading chapters 1 and 2 first. Other than that, feel free to skip around in the book as you wish.

SOURCE CODE

The ideas in this book are timeless; and, thanks to the community, the code listings are, too. They're available at the book's website, www.manning.com/books/machine-learning-with-tensorflow (http://www.manning.com/books/machine-learning-with-tensorflow); and the software will be kept up to date on the book's official GitHub repository, https://github.com/BinRoot/TensorFlow-Book. You're encouraged to contribute to the repo by sending pull requests or submitting new issues through GitHub.

NOTE TO PRINT BOOK READERS

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