PREFACE

This book starts with an introduction to fundamental aspects of `Python` programming, which include various data types, number formatting, `Unicode` and `UTF-8` handling, and text manipulation techniques. In addition. you will learn about loops, conditional logic, and reserved words in `Python`. You will also see how to handle user input, manage exceptions, and work with command-line arguments.

Next, the text transitions to the realm of Generative AI, discussing its distinction from Conversational AI. Popular platforms and models, including Bard and its competitors, are presented to give readers an understanding of the current AI landscape. The book also sheds light on the capabilities of Bard, its strengths, weaknesses, and potential applications. In addition, you will learn how to generate a variety of `Python` 3 code samples via Bard.

In essence, this book provides a modest bridge between the worlds of `Python` programming and AI, aiming to equip readers with the knowledge and skills to navigate both domains confidently.

THE TARGET AUDIENCE

This book is intended primarily for people who want to learn both `Python` and how to use Bard with `Python`. This book is also intended to reach an international audience of readers with highly diverse backgrounds in various age groups. In addition, this book uses standard English rather than colloquial expressions that might be confusing to those readers. This book provides a comfortable and meaningful learning experience for the intended readers.

DO I NEED TO LEARN THE THEORY PORTIONS OF THIS BOOK?

The answer depends on the extent to which you plan to become involved in working with Bard and `Python`, perhaps involving LLMs

and generative AI. In general, it's probably worthwhile to learn the more theoretical aspects of LLMs that are discussed in this book.

WHAT DO I NEED TO KNOW FOR THIS BOOK?

Although this book is introductory in nature, some knowledge of `Python` 3.x with certainly be helpful for the code samples. Knowledge of other programming languages (such as `Java`) can also be helpful because of the exposure to programming concepts and constructs.

DOES THIS BOOK CONTAIN PRODUCTION-LEVEL CODE SAMPLES?

This book contains basic code samples that are written in `Python`, and their primary purpose is to familiarize you with basic `Python` to help you understand the `Python` code generated via Bard. Moreover, clarity has higher priority than writing more compact code that is more difficult to understand (and possibly more prone to bugs). If you decide to use any of the code in this book, you ought to subject that code to the same rigorous analysis as the other parts of your code base.

COMPANION FILES

All the code samples and figures in this book may be obtained by writing to the publisher at *info@merclearning.com*.

If you are primarily interested in machine learning, there are some subfields of machine learning, such as deep learning and reinforcement learning (and deep reinforcement learning) that might appeal to you. Fortunately, there are many resources available, and you can perform an Internet search for those resources. One other point: the aspects of machine learning for you to learn will depend on your career: the needs of a machine learning engineer, data scientist, manager, student, or software developer are all different.

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