

## Audience

NLP is important for scientific, economic, social, and cultural reasons. NLP is experiencing rapid growth as its theories and methods are deployed in a variety of new language technologies. For this reason it is important for a wide range of people to have a working knowledge of NLP. Within industry, this includes people in human-computer interaction, business information analysis, and web software development. Within academia, it includes people in areas from humanities computing and corpus linguistics through to computer science and artificial intelligence. (To many people in academia, NLP is known by the name of “Computational Linguistics.”)

This book is intended for a diverse range of people who want to learn how to write programs that analyze written language, regardless of previous programming experience:

### *New to programming?*

The early chapters of the book are suitable for readers with no prior knowledge of programming, so long as you aren’t afraid to tackle new concepts and develop new computing skills. The book is full of examples that you can copy and try for yourself, together with hundreds of graded exercises. If you need a more general introduction to Python, see the list of Python resources at <http://docs.python.org/>.

### *New to Python?*

Experienced programmers can quickly learn enough Python using this book to get immersed in natural language processing. All relevant Python features are carefully explained and exemplified, and you will quickly come to appreciate Python’s suitability for this application area. The language index will help you locate relevant discussions in the book.

### *Already dreaming in Python?*

Skim the Python examples and dig into the interesting language analysis material that starts in [Chapter 1](#). You’ll soon be applying your skills to this fascinating domain.

## Emphasis

This book is a **practical** introduction to NLP. You will learn by example, write real programs, and grasp the value of being able to test an idea through implementation. If you haven’t learned already, this book will teach you **programming**. Unlike other programming books, we provide extensive illustrations and exercises from NLP. The approach we have taken is also **principled**, in that we cover the theoretical underpinnings and don’t shy away from careful linguistic and computational analysis. We have tried to be **pragmatic** in striking a balance between theory and application, identifying the connections and the tensions. Finally, we recognize that you won’t get through this unless it is also **pleasurable**, so we have tried to include many applications and examples that are interesting and entertaining, and sometimes whimsical.