textbook

Essential Programming for Linguistics
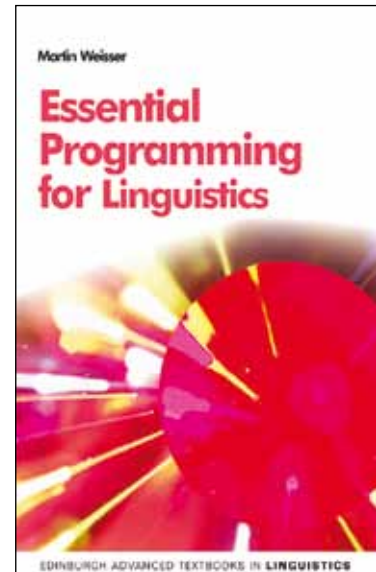
Martin Weisser

An introduction to programming for linguistics students and researchers who need to conduct computer-based analysis

Description

This book is an ideal starting point for linguists who are approaching computer programming for the first time. Assuming no background knowledge of programming, the author introduces basic ideas and techniques needed and helps readers to develop their understanding of electronic texts.

Practical examples are designed to help the reader to identify basic issues in handling language data, conduct simple analyses in morphology/morphosyntax and phonotactics, create frequency lists from corpus materials, gather basic descriptive statistics on texts and design graphical user interfaces for writing more efficient and easy-to-use analysis tools.

Two different types of exercise help readers to either learn to interpret and understand illustrative sample code, or to develop algorithmic thinking and solution strategies through turning a series of instructions into sample programs.

Key Features

- A 'how to' guide for students of linguistics attempting to process material for dissertations, theses or advanced research work
- Clear illustration of programming theory and techniques through the use of linguistics examples
- Coverage progresses from basic to more complex topics and methodologies
- Chapters on the advantages of modularity and associated issues provide a basis for more advanced projects
- Introduces graphical user interfaces, providing a basis for user-friendly programs and multi-lingual analysis

Selling Points

- First title in our new Edinburgh Advanced Textbooks in Linguistics series
- An accompanying web page hosted by EUP will contain practice materials for analysis and experimentation with methods explained in the book
- Examples taken from linguistic contexts - this subject specificity puts the programming in context for readers
- Progression from basic notions to more advanced techniques makes this an ideal course text or personal guide
- Introduces important issues in dealing with language on the computer, such as using the web as a corpus, multi-lingual processing and Unicode

The Author

Martin Weisser is Lecturer in English Language at Chemnitz University of Technology, Germany.

Series

Edinburgh Advanced Textbooks in Linguistics

Readership

Advanced students in linguistics, researchers in linguistics without any prior programming knowledge, computer scientists requiring an introduction to linguistic analysis/ concepts.

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Courses

Corpus Linguistics
Computational Linguistics
Language and Computers
Programming for Linguists