OPEN SOURCE/DATA VISUALIZATION

QNUPIOT IN ACTION Second Edition Philipp K. Janert

nuplot is an open-source graphics program that helps you analyze, interpret, and present numerical data. Available for Unix, Mac, and Windows, it is wellmaintained, mature, and totally free.

gnuplot in Action, Second Edition is a major revision of this authoritative guide for developers, engineers, and scientists. The book starts with a tutorial introduction, followed by a systematic overview of gnuplot's core features and full coverage of gnuplot's advanced capabilities. Experienced readers will appreciate the discussion of gnuplot 5's features, including new plot types, improved text and color handling, and support for interactive, web-based display formats. The book concludes with chapters on graphical effects and general techniques for understanding data with graphs. It includes four pages of color illustrations. 3D graphics, false-color plots, heatmaps, and multivariate visualizations are covered in chapter-length appendixes available in the eBook.

^CThe highly anticipated, updated version of my go-to-for-everything book on gnuplot." -Ryan Balfanz, Shift Medical, Inc.

What's Inside

- Creating different types of graphs in detail
- Animations, scripting, batch operations
- Extensive discussion of terminals
- Updated to cover gnuplot version 5

^{cc}The essential guide for newcomers and the definitive handbook for advanced users."

-Zoltán Vörös University of Innsbruck

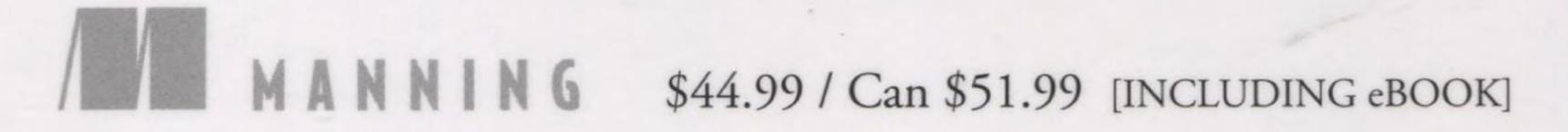
^CLearn how to use gnuplot to convert meaningful data into attention-grabbing visualizations that communicate your message quickly and accurately." -David Kerns

Rincon Research Corporation

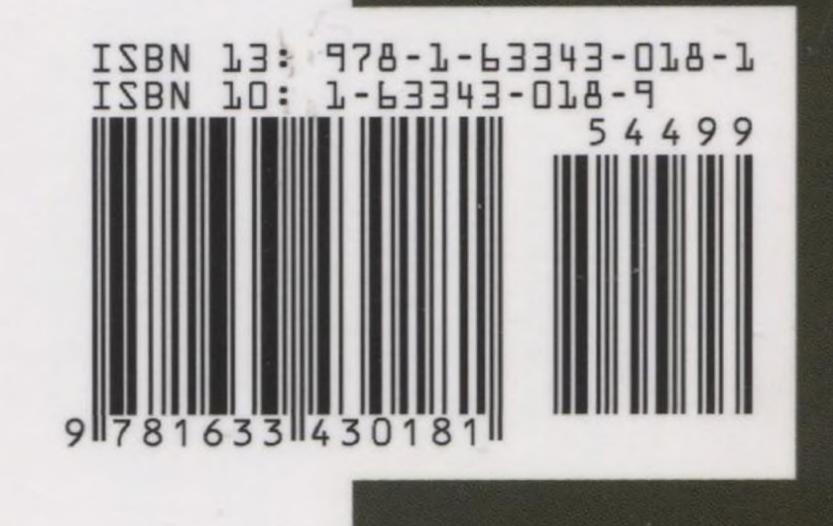
No prior experience with gnuplot is required. This book concentrates on practical applications of gnuplot relevant to users of all levels.

Philipp K. Janert, PhD, is a programmer and scientist. He is the author of several books on data analysis and applied math and has been a gnuplot power user and developer for over 20 years.

To download their free eBook in PDF, ePub, and Kindle formats, owners of this book should visit manning.com/books/gnuplot-in-action-second-edition



An accessible guide to gnuplot and best practices of everyday data visualization." -Wesley R. Elsberry, PhD RealPage, Inc.





PART 1 GETTING STARTED.

- 1 Prelude: understanding data with gnuplot 3
- 2 Tutorial: essential gnuplot 16
- **3** The heart of the matter: the plot command 31

PART 2 **CREATING GRAPHS** ...

- 4 Managing data sets and files 55
- 5 Practical matters: strings, loops, and history 78
- 6 A catalog of styles 100
- Decorations: labels, arrows, and explanations
- All about axes 146 8

PART 3 MASTERING TECHNICALITIES.....

- 9 Color, style, and appearance 181
- 10 Terminals and output formats 209
- 11 Automation, scripting, and animation 236
- **12** Beyond the defaults: workflow and styles 262

PART 4 UNDERSTANDING DATA.....

- 13 Basic techniques of graphical analysis
- 14 Topics in graphical analysis 314
- 15 Coda: understanding data with graphs

brief contents

53

125

179

289 344