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Titolo	Mastering matplotlib : a practical guide that takes you beyond the basics of matplotlib and gives solutions to plot complex data // Duncan M. McGregor
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ISBN	1-78398-755-3
Edizione	[1st edition]
Descrizione fisica	1 online resource (292 p.)
Collana	Community Experience Distilled
Disciplina	005.133
Soggetti	Python (Computer program language) Charts, diagrams, etc - Computer programs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover; Copyright; Credits; About the Author; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Getting Up to Speed; A brief historical overview of matplotlib; What's new in matplotlib 1.4; The intermediate matplotlib user; Prerequisites for this book; Python 3; Coding style; Installing matplotlib; Using IPython Notebooks with matplotlib; Advanced plots - a preview; Setting up the interactive backend; Joint plots with Seaborn; Scatter plot matrix graphs with Pandas; Summary; Chapter 2: The matplotlib Architecture; The original design goals The current matplotlib architectureThe backend layer; FigureCanvasBase; RendererBase; Event; Visualizing the backend layer; The artist layer; Primitives; Containers; Collections; A view of the artist layer; The scripting layer; The supporting components of the matplotlib stack; matplotlib modules; Exploring the filesystem; Exploring imports visually; ModuleFinder; ModGrapher; The execution flow; An overview of the script; An interactive session; The matplotlib architecture as it relates to this book; Summary; Chapter 3: matplotlib APIs and Integrations; The procedural pylab API The pyplot scripting APIThe matplotlib object-oriented API; Equations; Helper classes; The Plotter class; Running the jobs; matplotlib in other frameworks; An important note on IPython; Summary; Chapter 4: Event

Handling and Interactive Plots; Event loops in matplotlib; Event-based systems; The event loop; GUI toolkit main loops; IPython Notebook event loops; matplotlib event loops; Event handling; Mouse events; Keyboard events; Axes and figure events; Object picking; Compound event handling; The navigation toolbar; Specialized events; Interactive panning and zooming; Summary  
File and directory locations Using the matplotlibrc file; Updating the settings dynamically; Options in IPython; Summary; Chapter 7: Deploying matplotlib in Cloud Environments; Making a use case for matplotlib in the Cloud; The data source; Defining a workflow; Choosing technologies; Configuration management; The types of deployment; An example - AWS and Docker; Getting set up locally; Requirements; Dockerfiles and the Docker images; Extending a Docker image; Building a new image; Preparing for deployment; Getting setup on AWS; Pushing the source data to S3; Creating a host server on EC2 Using Docker on EC2

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### Sommario/riassunto

If you are a scientist, programmer, software engineer, or student who has working knowledge of matplotlib and now want to extend your usage of matplotlib to plot complex graphs and charts and handle large datasets, then this book is for you.

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