

CREATING DASHBOARDS IN PYTHON

COURSE GUIDE (V1): 2025 © 2025 PYTHON CHARMERS

Creating Dashboards in Python

A specialist course

Skills: You will learn how to go from scientific code in notebooks to rapid prototypes of dashboards and GUI apps. You will also learn best practices for building scaling your dashboard apps in complexity while keeping them maintainable and performant.

Overview: This course teaches you how to create dashboards and GUIs with Python and the *Streamlit* package, with a focus on scientific appliactions.

Prerequisites: Prior experience with programming in *Python*.

Format: Live instructor-led training (online). Each topic is a mixture of expert instruction, worked examples, and hands-on exercises with help from the instructor(s).

Expert instructors: See bios below.

Duration: 1 day

Price:

AUD \$900 (excl GST)

Dates:

https://pythoncharmers.com/upcoming-courses/



Topic outline

Single-day course

- Basic input and output widgets
- Best practices with *Streamlit*
- Charts / plots in various formats; containers
- Caching: memory and disk caching
- Forms; session state
- Worked examples
- Optional: Deploying *Streamlit* apps
- Overview of other packages for creating dashboards and GUIs in Python



Personal help

We are happy to offer on-the-spot problem-solving after each day of the training for you to ask one-on-one questions — whether about the course content and exercises or about specific problems you face in your work and how to solve them. If you would like us to prepare for this in advance, you are welcome to send us background info before the course.



Other information

Format: Courses are conducted online via video meeting using Python Charmers' cloud notebook server for sharing code with the trainer(s).

Computer:

- **Hardware**: we recommend ≥ 8 GB of RAM and a webcam. Preferably also multiple screens and a quiet room (or headset mic).
- **Software**: a modern browser: Chrome, Firefox, or Safari (not IE or Edge); and Zoom.
- **Coding**: we have a cloud-based coding server that supports running code and sharing code with the trainer(s).

Timing: Most courses will run from 9:00 to roughly 17:00 (AEST/AEDT) each day, with breaks of 50 minutes for lunch and 20 minutes each for morning and afternoon tea.

Certificate of completion: We will provide you a certificate if you complete the course and successfully answer the majority of the exercise questions.

Materials: You will have access to all the course materials via the cloud server. We will also send you a bound copy of the course notes, cheat sheets, and a USB stick containing the materials, exercise solutions, and further resources.

data, cmap='winter') oython3.7/site-packages/matpl elementwi comparison str

Instructor bio



Dr Edward Schofield

Ed has consulted to or trained over 3000 people from dozens of organisations in data analytics using Python, including Atlassian, Barclays, Cisco, CSIRO, Dolby, Harvard University, IMC, Singtel Optus, Oracle, Shell, Telstra, Toyota, Verizon, and Westpac. He is well-known in the Python community as a former release manager of *SciPy* and the author of the widely used *future* package. He regularly presents at conferences in data science and Python in Australia and internationally.

Ed holds a PhD in machine learning from Imperial College London. He also holds BA and MA (Hons) degrees in mathematics and computer science from Trinity College, University of Cambridge. He has 20+ years of experience in programming, teaching, and public speaking.



Instructor bio



Dr Robert Layton

Robert is the author of the book "Data Mining in Python", published by Packt. He provides analysis, consultancy, research and development work to businesses, primarily using Python. Robert has worked with government, financial and security sectors, in both a consultancy and academic role. He is also a Research Fellow at the Internet Commerce Security Laboratory, investigating cybercrime analytics and data-mining algorithms for attribution and profiling.

Robert is a contributor to the Python-based *scikit-learn* open source project for machine learning and writes regularly on data mining for a number of outlets. He was the author of the website "LearningTensorflow.com", sold to DataBricks. He has presented at a number of international conferences in Python, data analysis, and its applications.





About Python Charmers®

Python Charmers is a leading global provider of training in data science and software development, based in Australia and Singapore. Since 2010, Python Charmers has given over 600 training courses and bootcamps to over 6,000 delighted people from organizations such as AGL, Atlassian, Barclays, CSIRO, Cisco, Deloitte, Dolby, IMC, pwc, Singtel Optus, Shell, Sportsbet, Telstra, Toyota, Verizon, Westpac, and Woolworths. Python Charmers specializes in teaching programming and data science to scientists, engineers, data analysts, quants, and computer scientists.

Python Charmers' trainers boast years of experience with data science, data analytics, statistical modelling, and programming, and deep roots in the open source community, as both speakers at events and contributors to well-known open source projects for data science, including *NumPy*, *SciPy*, *Scikit-Learn*, *Pandas*, *Matplotlib*, *Scikit-Image*, *NetworkX*, and *Python-Future*.

Testimonials: Testimonials from past participants of similar bootcamps and training courses are available at

https://pythoncharmers.com/testimonials/

Questions: We are happy to customise this program further on request. Please let us know if you would like to discuss this or have any other questions.

Contact:

Phone: +61 1300 963 160

Email: info@pythoncharmers.com

Web: pythoncharmers.com



