

PyVista: A Python Library for Interactive 3D Data Visualization and Analysis

Abstract

This poster showcases the powerful features of PyVista, a Python library for 3D data visualization and analysis. We demonstrate PyVista’s ability to create interactive 3D visualizations, process, and filter point cloud data, perform advanced modeling and analysis, and more. We also highlight PyVista’s ease of use and flexibility, making it an excellent tool for anyone working with 3D data. Our poster includes code examples and visualizations to demonstrate PyVista’s capabilities and provide practical applications for users. Our poster is a great resource for those looking to enhance their 3D data analysis and visualization workflows using PyVista.

Caveats

- ▶ Nothing too complicated!
- ▶ No verbatim or fragile stuff!
- ▶ No # and _ characters!
- ▶ (I used \texthash and \textunderscore)
- ▶ Alternatives: Pandoc, wiktobeamer

Overview

- ▶ This is the template I created for my poster presentations. [?]
- ▶ You can provide an optional \footimage. [?]

Options

- ▶ It’s based on beamerposter, so you can change some options:
 - size** a0, a0b, a1, a2, a3, a4
 - orientation** landscape, portrait
 - scale** a decimal number to scale the fonts

Colour Themes

- ▶ I’ve included some colour themes, using the colour palettes from <http://colourlovers.com>
 - ComingClean (current theme)
 - Entrepreneur (light blue + grey)
 - Conspicuous (a bit garish!)

Figures and images

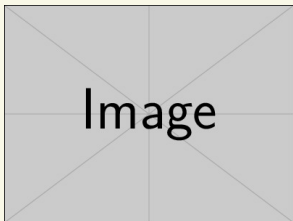


Figure: An exemplary image

This is a sample

- ▶ One, two, pick up my shoe
- ▶ Three, four, shut the door
- ▶ Five, six, pick up sticks
- ▶ Seven, eight, lay them straight
- ▶ Nine, ten, a big fat hen
- ▶ One, two, pick up my shoe
- ▶ Three, four, shut the door
- ▶ Five, six, pick up sticks
- ▶ Seven, eight, lay them straight
- ▶ Nine, ten, a big fat hen

This is another sample

- ▶ Some maths material

$$A = U \times S \times V^T \sigma = \frac{x \times y}{\sqrt[3]{\alpha + \beta}} \tag{1}$$

pipeTables and tableCaptions

Right	Left	Default	Center
12	12	12	12
123	123	123	123
1	1	1	1

Table: Demonstration of pipe table syntax.

This is a sample of a wiiiide column

- ▶ One, two, pick up my shoe
- ▶ Three, four, shut the door
- ▶ Five, six, pick up sticks

Tetsuo Koyama

tkoyama@gmail.com

PyVista community

