

Installed Font Test

This file shows the fonts installed and accessible to Quarto/Matplotlib. It's used partly to audit the latest Docker/Podman image release and partly to allow students to explore what is available in a reasonably intuitive fashion.

Raw List

Taken directly from Matplotlib's font cache:

```
1 ! grep 'name' ~/.cache/matplotlib/fontlist-v390.json | sort | uniq
```

```
grep: /Users/jreades/.cache/matplotlib/fontlist-v390.json: No such file or directory
```

Formatted List

Taken from Matplotlib's font manager tool.

Warning

Please note that fonts may not render correctly in Safari, but will do so in Google Chrome and other browsers. The *list* is correct and these fonts *can* be used to render PDFs from Quarto.

```
1 from matplotlib import font_manager
2 from IPython.core.display import HTML
3
4 flist = font_manager.findSystemFonts()
5 names = []
6 for fname in flist:
7     try:
8         names.append(font_manager.FontProperties(fname=fname).get_name())
9     except RuntimeError:
10         print(f"- Problem detected with {fname}, skipping...") # Think the issue is
11
12 print(f"Found {len(set(names))} valid fonts.")
13
14 def make_html(fontname):
15     return "<p><span style='font-family:{font}; font-size: 20px;'>{font}</span></p>"
16
17 code = "\n".join([make_html(font) for font in sorted(set(names))])
```

18

```
19 HTML("<div style='column-count: 2;'>{}</div>".format(code))
```

```
- Problem detected with /System/Library/Fonts/ZitherIndia.otf, skipping...
- Problem detected with /System/Library/Fonts/Supplemental/NISC18030.ttf, skipping..
- Problem detected with /System/Library/Fonts/ZitherTamil.otf, skipping...
- Problem detected with /System/Library/Fonts/Apple Color Emoji.ttc, skipping...
- Problem detected with /System/Library/PrivateFrameworks/FontServices.framework/Res
- Problem detected with /System/Library/Fonts/ZitherMalayalam.otf, skipping...
Found 400 valid fonts.
```

```
<IPython.core.display.HTML object>
```

Plotting Test

A quick test to ensure that a font is rendering correctly.

```
1 import numpy as np
2 import matplotlib.pyplot as plt
3 x = np.random.random(20)
4 y = np.random.random(20)
5
6 ff = 'SPectral SC'
7 tfont = {'fontname':ff}
8 bfont = {'fontname':ff, 'weight':'bold', 'horizontalalignment':'left'}
9 afont = {'fontname':ff}
10
11 f,ax = plt.subplots(1,1,figsize=(7,5))
12 plt.scatter(x,y)
13 f.suptitle("Testing Font Spec", x=0.025, ha='left', size=24, **tfont)
14 ax.set_ylabel('Median Price', size=20, **afont)
15 ax.set_xlabel('Count', size=20, **afont)
```

```
Text(0.5, 0, 'Count')
```

```
findfont: Font family 'SPectral SC' not found.
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```

Testing Font Spec

