## **Polar Subplot**

```
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
# Apply seaborn style
sns.set(style="whitegrid")
# Define the radial values
r = np.arange(0, 2, 0.01)
# Calculate the corresponding angles for the spiral
theta = 2 * np.pi * r
# Create a figure and a polar subplot
fig, ax = plt.subplots(subplot_kw={'projection': 'polar'})
# Plot the spiral with color gradient
scatter = ax.scatter(theta, r, c=r, s=10, cmap='coolwarm', edgecolors='none')
# Add a color bar to show the color scale
cbar = plt.colorbar(scatter, ax=ax)
cbar.set_label('Radial Distance')
# Set the radial ticks
ax.set_rticks([0.5, 1, 1.5, 2, 2.5, 3])
# Enable grid
ax.grid(True)
# Show the plot
plt.show()
```

