

Matplotlib 13_ Belajar 3D Plot

June 8, 2022

1 3D Plotting

Dalam sesi ini kita akan mempelajari cara membuat 3D plotting dengan Matplotlib.

1.1 1. Import Modules

```
[1]: %matplotlib inline
```

```
[2]: import matplotlib
import matplotlib.pyplot as plt
import numpy as np

print(matplotlib.__version__)
print(np.__version__)
```

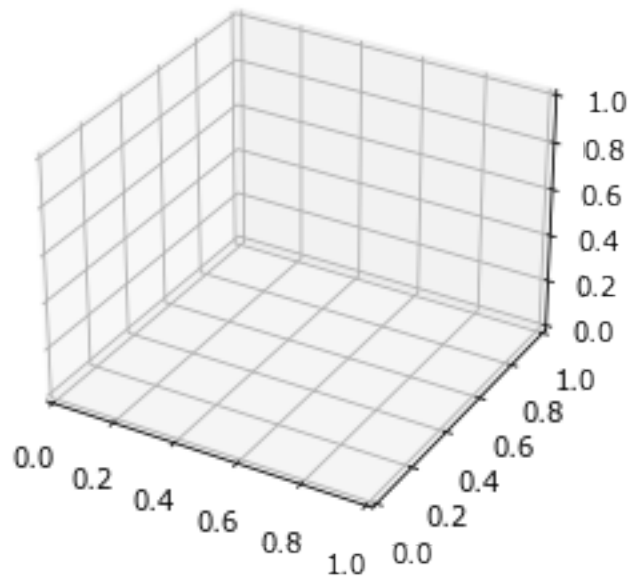
3.3.4

1.20.1

1.2 2. 3D Axes

```
[3]: fig = plt.figure()
ax = plt.axes(projection='3d')

plt.show()
```



1.3 3. 3D Line Plot

```
[4]: z = np.linspace(0, 1, 100)
     x = z * np.sin(20 * z)
     y = z * np.cos(20 * z)
```

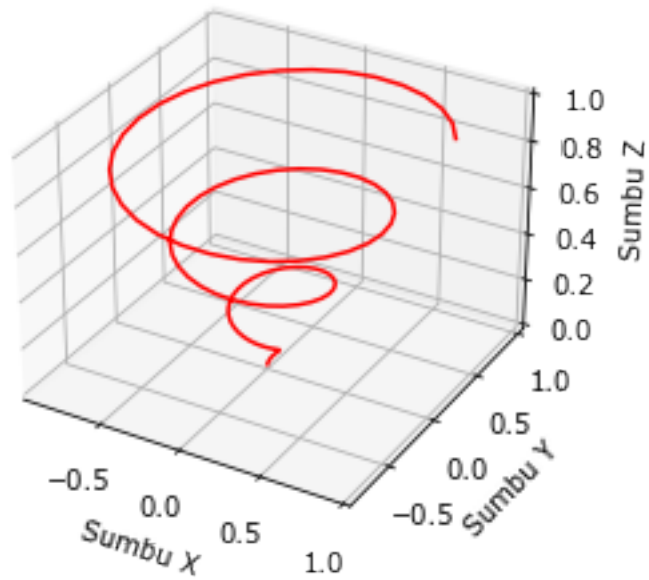
```
[5]: fig = plt.figure()
     ax = plt.axes(projection='3d')

     ax.plot(x, y, z, color='red')

     ax.set(title='Contoh 3D Line Plot',
           xlabel='Sumbu X',
           ylabel='Sumbu Y',
           zlabel='Sumbu Z')

     plt.show()
```

Contoh 3D Line Plot



1.4 4. 3D Scatter Plot

```
[6]: z = np.linspace(0, 1, 100)
x = z * np.sin(20 * z)
y = z * np.cos(20 * z)
```

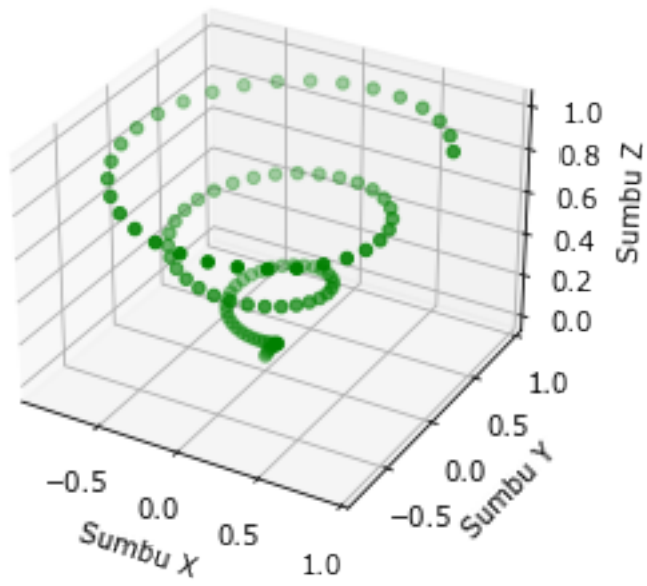
```
[7]: fig = plt.figure()
ax = plt.axes(projection='3d')

ax.scatter(x, y, z, color='green')

ax.set(title='Contoh 3D Scatter Plot',
       xlabel='Sumbu X',
       ylabel='Sumbu Y',
       zlabel='Sumbu Z')

plt.show()
```

Contoh 3D Scatter Plot



[]: