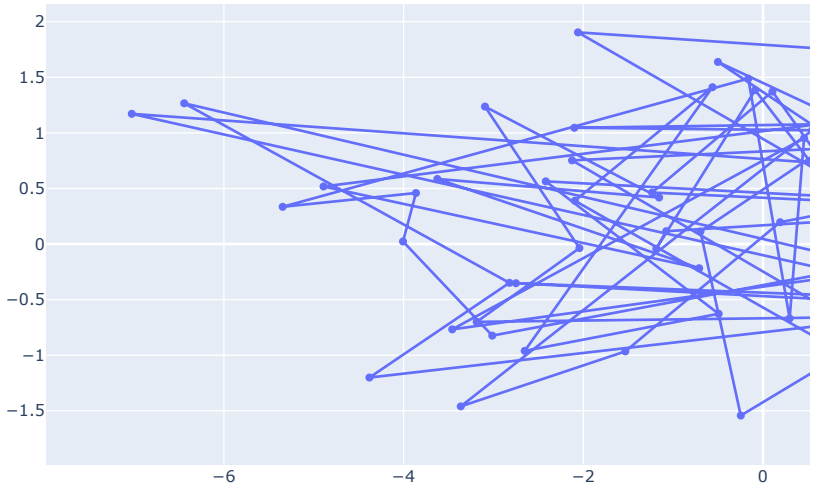
Robot Navigation Performance Visualization:

```
import plotly.graph_objects as go
import numpy as np
import math

N=60

x = np.random.randn(N)*3
y = np.random.randn(N)*2**1/2
```

```
#3 axis scater plot
fig = go.Figure(data=go.Scatter(x=x, y=y, mode='markers+lines'))


fig.update_layout(
    scene=dict(
        xaxis=dict(title='X Axis'),
        yaxis=dict(title='Y Axis'),
    )
)

# Show the plot
fig.show()
```



```
import plotly.graph_objects as go

N = 10

# Generate 3D data
x = np.random.randn(N)*3.0482433
y = np.random.randn(N)*2.973
z = np.random.randn(N)*4

marker_size = 10
fig = go.Figure(
    data=go.Scatter3d(
        x=x, y=y, z=z,
        mode="markers + lines",
        marker=dict(
            size=marker_size, opacity=0.8, color=np.random.rand(N),
        ),
    )
)

fig.update_layout(
    scene=dict(
        xaxis=dict(title='X',range=[-20, 20]),
        yaxis=dict(title='Y',range=[-20, 20]),
        zaxis=dict(title='Z',range=[-20, 20]),
    )
)
fig.show()
```