

## Copilot

I apologize for the confusion. The error message is indicating that the `from_rotvec` function expects a rotation vector of shape  $(3,)$  or  $(N, 3)$ , but it received a vector of shape  $(18,)$ . This is because the `as_rotvec` function returns a rotation vector of shape  $(3,)$  for each rotation, and concatenating these vectors results in a vector of shape  $(18,)$ .

Instead of concatenating the rotation vectors, you should keep them as a list of rotations. Here's how you can modify the code:

```
# Create a rotation matrix that aligns the z-axis with the key direction for each key time
key_rot = [sp.spatial.transform.Rotation.align_vectors(
    np.array([[0, 0, 1]]), # z-axis
    np.array([direction]) # key direction
)[0] for direction in key_direction]

slerp = sp.spatial.transform.Slerp(key_times, key_rot)
```

In this modified code, `key_rot` is a list of `Rotation` objects, and this list is directly passed to the `Slerp` function. This should resolve the error.

I hope this helps! Let me know if you have any other questions. 😊