liedb_g3d_lie20_half_inter.mat is a dictionary of the form {lieDir, lie} where:

- lieDir = ".\data\g3d\"
- lie is an n-dimensional array/list which contains:
 - o id (sample id)
 - name (paths to each training/test sample)
 - o set (1 for training, 2 for test)
 - o label (actions are numbered from 1 to 20)
 - o pooling index

Example:

```
\label{lie.name} $$ \text{lie.name} = ['lie20\_half\_inter1\11\10.mat', \dots, 'lie20\_half\_inter1\13\507\_1.mat', \dots] $$ \text{lie.label} = [1, \dots, 5, \dots] $$ \text{lie.set} = [2, \dots, 1, \dots] $$
```

The features are stored in the folder **lie20_half_inter1** and are lists of dimensions matrix_height x matrix_width x frames x #matrices :

- matrix_height = matrix_width = 3, since all matrices are 3x3 rotation matrices
- frames = 100
- #matrices = 342 (there are 20 joints -> 19 edges, so 19*18 = 342 pairs of edges)

Thus, the features are 3 x 3 x 342 x 100 – dimensional lists