
Algorithm 1 Main Loop

```
1: procedure MAIN
2:    $EPISODES \leftarrow 200$ 
3:    $ITERATIONS \leftarrow 100$ 
4:    $clientID \leftarrow \text{startCommunication}()$ 
5:    $jointHandles \leftarrow \text{getJointHandles}(clientID)$ 
6:    $jointPos \leftarrow \text{getJointPositions}(clientID, jointHandles)$ 
7:    $cartesianJointPos \leftarrow \text{getJointPositions}(clientID, jointHandles)$ 
8:    $velStart \leftarrow 0$ 
9:
10:  for  $i \leftarrow 0, EPISODES$  do
11:    Start Simulation
12:    for  $j \leftarrow 0, ITERATIONS$  do
13:       $velEnd \leftarrow \text{getNewVelocity}(clientID, jointPos)$ 
14:
15:      Save  $jointPos, cartesianJointPos, velStart, velEnd$ 
16:
17:       $velStart \leftarrow \text{smoothTrajectory}(clientID, jointPos, velStart, velEnd)$ 
18:       $jointPos \leftarrow \text{getJointPositions}(clientID, jointHandles)$ 
19:       $cartesianJointPos \leftarrow \text{getJointPositions}(clientID, jointHandles)$ 
20:
21:    Stop Simulation
```
