

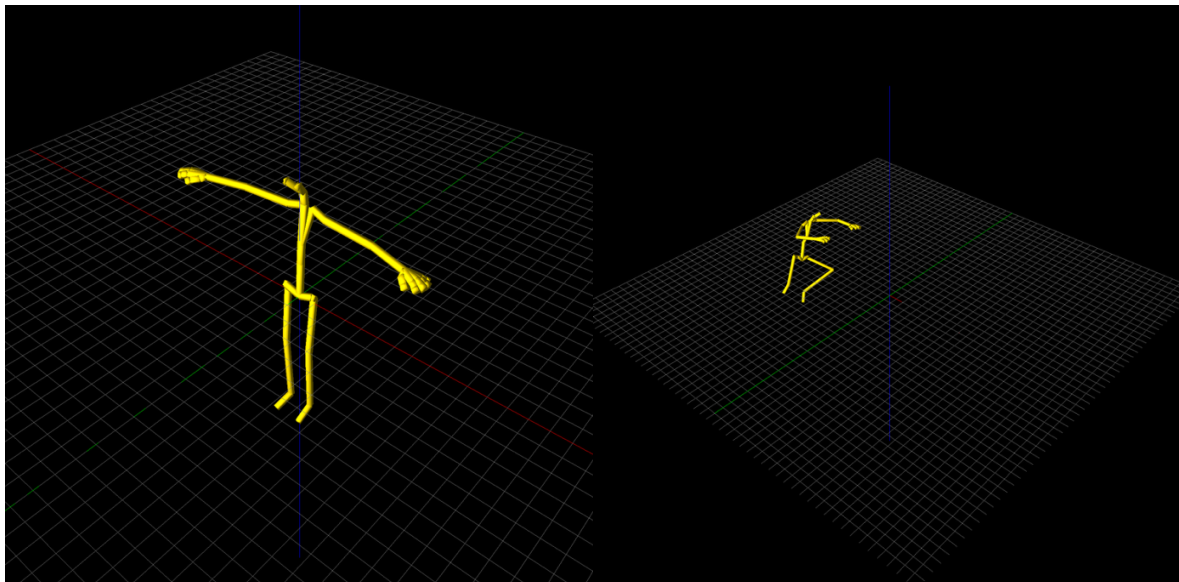
Project 3: BVH Viewer

Implementation

- Implemented the following:
 - Gray grid and xyz axis (from project 1)
 - Camera manipulation with mouse (left mouse button) drag movement. (from project 1)
 - Orbit (alt)
 - Pan: (shift+alt)
 - Zoom: (ctrl+alt)
 - Opens, loads, and displays bvh file by drag-and-drop to viewer window
 - Prints the file name, number of frames, FPS, number of joints, and list of all joint names in the terminal
 - Support for animating the loaded motion when pressing “spacebar” key
 - Uses box rendering
 - Provides OBJ rendering mode
 - Each link is rendered using a separate OBJ file for each part
 - Support for loading a predefined file when pressing “1” key
 - Rendering with Phong illumination and shading.

Program

1. Dragging a bvh file (rest position, movement, terminal output)



```
File name: 142_21.bvh
Number of frames: 1413
FPS: 120.00
Number of joints: 43
List of joint names:
  hip
  abdomen
  chest
  neck
  head
  leftEye
  rightEye
  rCollar
  rShldr
  rForeArm
  rHand
  rThumb1
  rThumb2
  rIndex1
  rIndex2
  rMid1
  rMid2
  rRing1
  rRing2
  rPinky1
  rPinky2
  lCollar
  lShldr
  lForeArm
  lHand
  lThumb1
  lThumb2
  lIndex1
  lIndex2
  lMid1
  lMid2
  lRing1
  lRing2
  lPinky1
  lPinky2
  rButtock
  rThigh
  rShin
  rFoot
  lButtock
  lThigh
  lShin
  lFoot
```

2. Loading OBJ rendering mode

