

# AI & Robotics

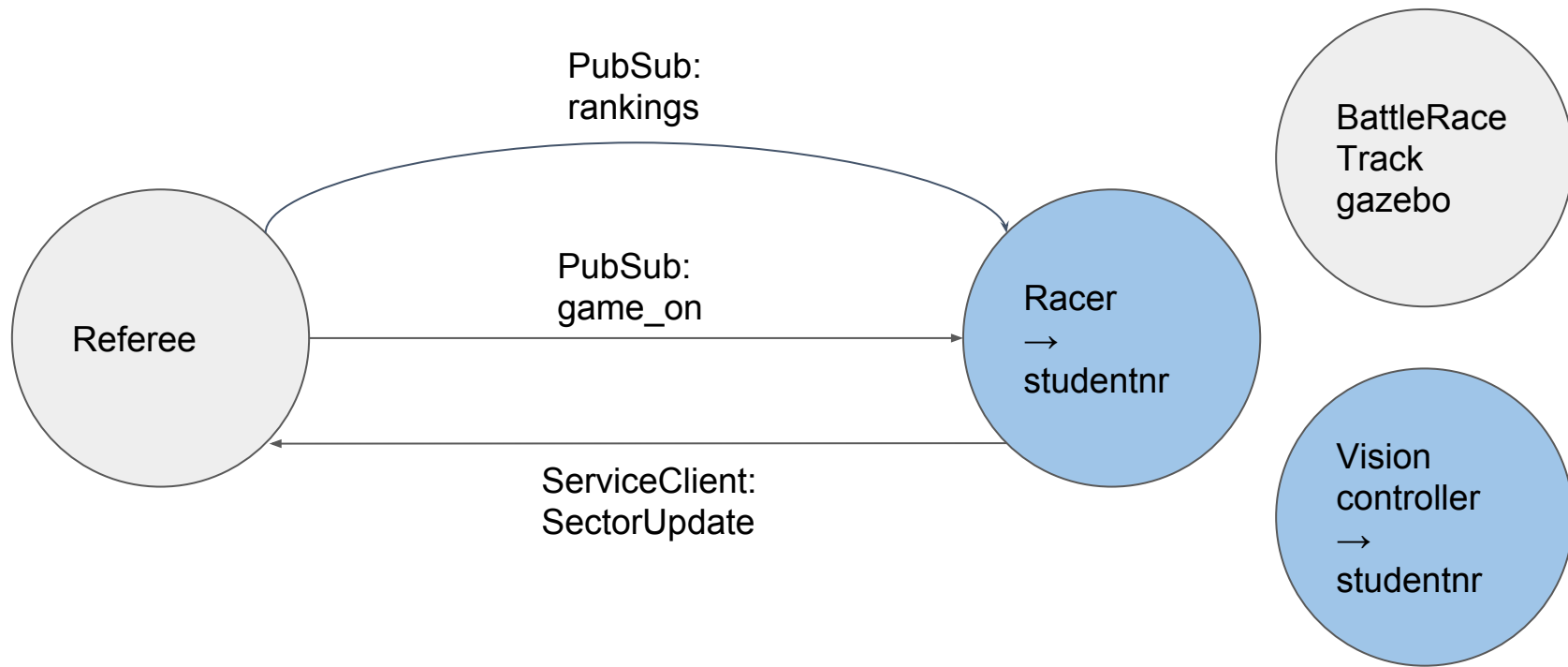
PIT: Drive Stern4most  
Battle

# Goals



## The **junior-colleague**

- can communicate with the status server
- can recognize racetrack sectors



# Communication topics

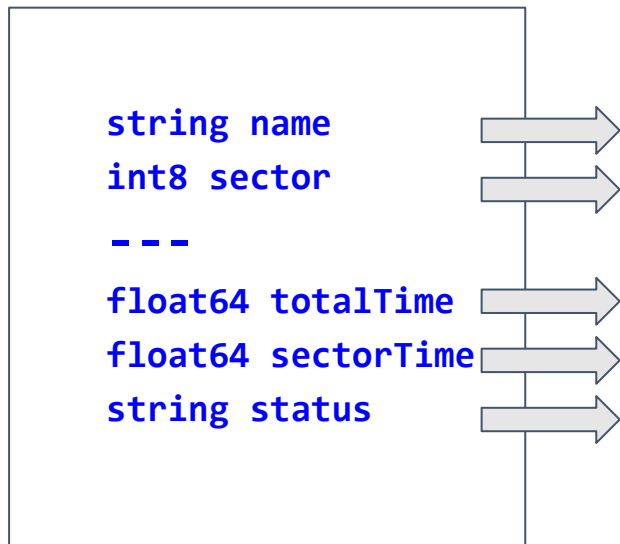
- **game\_on:**

- Publishes at start
- Countdown: (5, 4, 3, 2, 1)
- Start sign: 'Start'

- **ranking:**

- Publishes every 10s
- String representation of a list of tuples:  
(<playername>, <round , sector, total\_time, last\_sector\_time>)  
(<playername>, <round , sector, total\_time, last\_sector\_time>)  
...  
○ Parse it!

# Communication: message format



## Request

Player name

Current sector passed

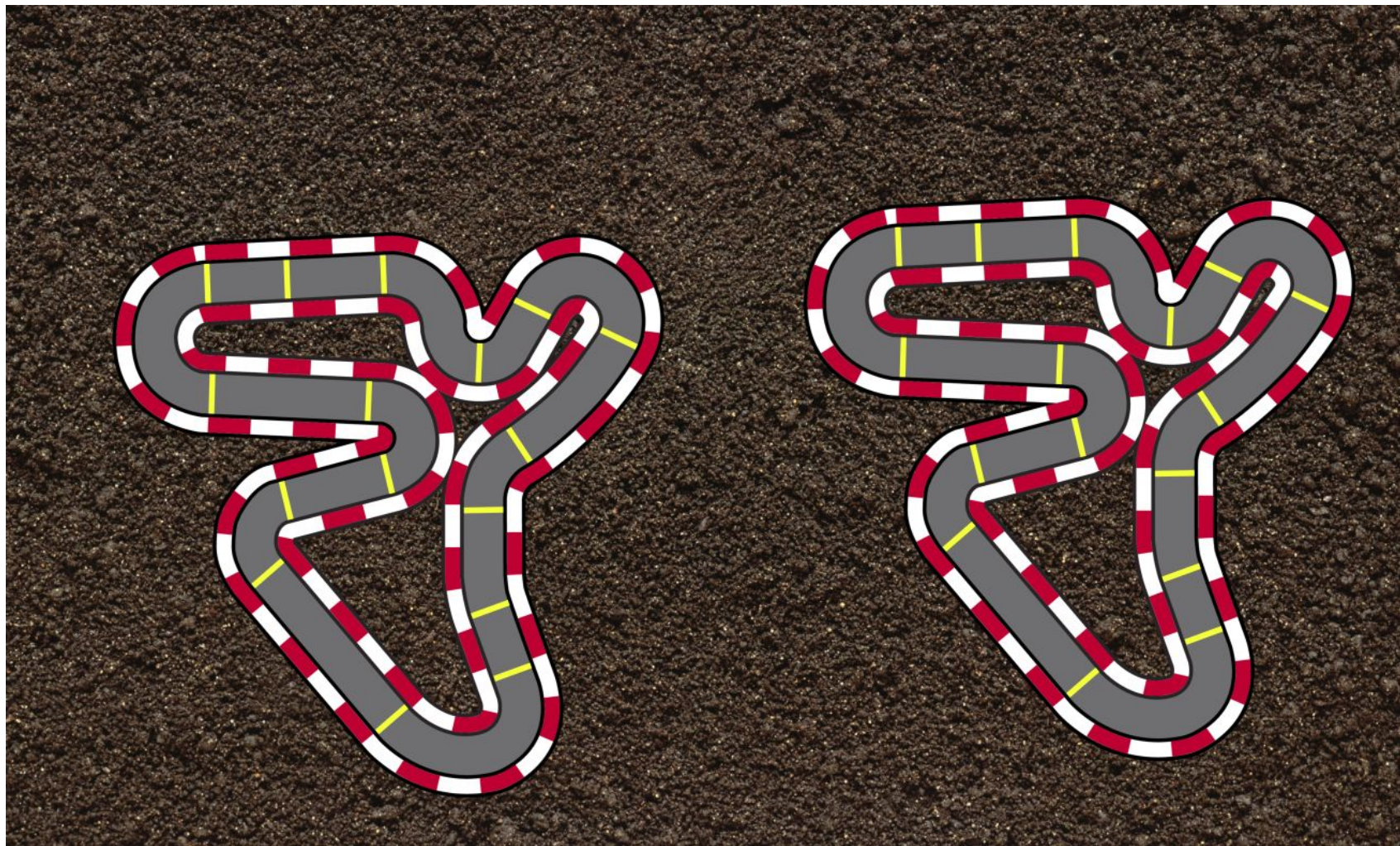
## Response

Total elapsed time

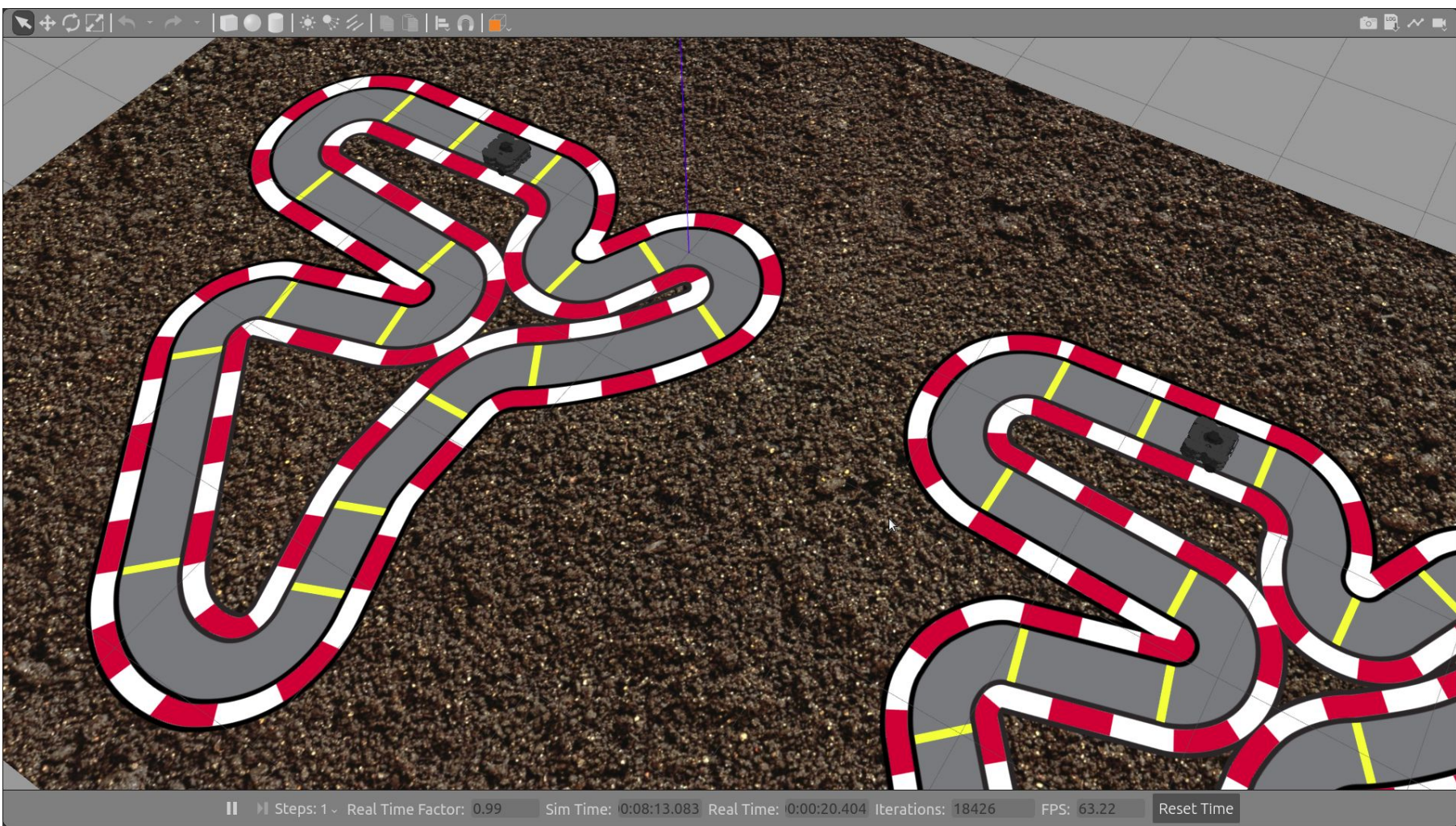
Last sector time

Current status:

- "Round: # - Sector: #"
- "WRONG SECTOR"
- "FINISHED"







|| ▶ Steps: 1 ▾ Real Time Factor: 0.99 Sim Time: 0:08:13.083 Real Time: 0:00:20.404 Iterations: 18426 FPS: 63.22 [Reset Time](#)



```
/gazebo/set_link_state
/gazebo/set_model_state
/player_one/camera/depth/camera_info
/player_one/camera/depth/image_raw
/player_one/camera/depth/points
/player_one/camera/parameter_descriptions
/player_one/camera/parameter_updates
/player_one/camera/rgb/camera_info
/player_one/camera/rgb/image_raw
/player_one/camera/rgb/image_raw/compressed
/player_one/camera/rgb/image_raw/compressed/parameter_descriptions
/player_one/camera/rgb/image_raw/compressed/parameter_updates
/player_one/camera/rgb/image_raw/compressedDepth
/player_one/camera/rgb/image_raw/compressedDepth/parameter_descriptions
/player_one/camera/rgb/image_raw/compressedDepth/parameter_updates
/player_one/camera/rgb/image_raw/theora
/player_one/camera/rgb/image_raw/theora/parameter_descriptions
/player_one/camera/rgb/image_raw/theora/parameter_updates
/player_one/cmd_vel
/player_one/imu
/player_one/joint_states
/player_one/odom
/player_one/scan
/player_two/camera/depth/camera_info
/player_two/camera/depth/image_raw
/player_two/camera/depth/points
/player_two/camera/parameter_descriptions
/player_two/camera/parameter_updates
/player_two/camera/rgb/camera_info
/player_two/camera/rgb/image_raw
/player_two/camera/rgb/image_raw/compressed
/player_two/camera/rgb/image_raw/compressed/parameter_descriptions
/player_two/camera/rgb/image_raw/compressed/parameter_updates
/player_two/camera/rgb/image_raw/compressedDepth
/player_two/camera/rgb/image_raw/compressedDepth/parameter_descriptions
/player_two/camera/rgb/image_raw/compressedDepth/parameter_updates
/player_two/camera/rgb/image_raw/theora
/player_two/camera/rgb/image_raw/theora/parameter_descriptions
/player_two/camera/rgb/image_raw/theora/parameter_updates
/player_two/cmd_vel
/player_two/imu
/player_two/joint_states
/player_two/odom
/player_two/scan
/rosout
```



