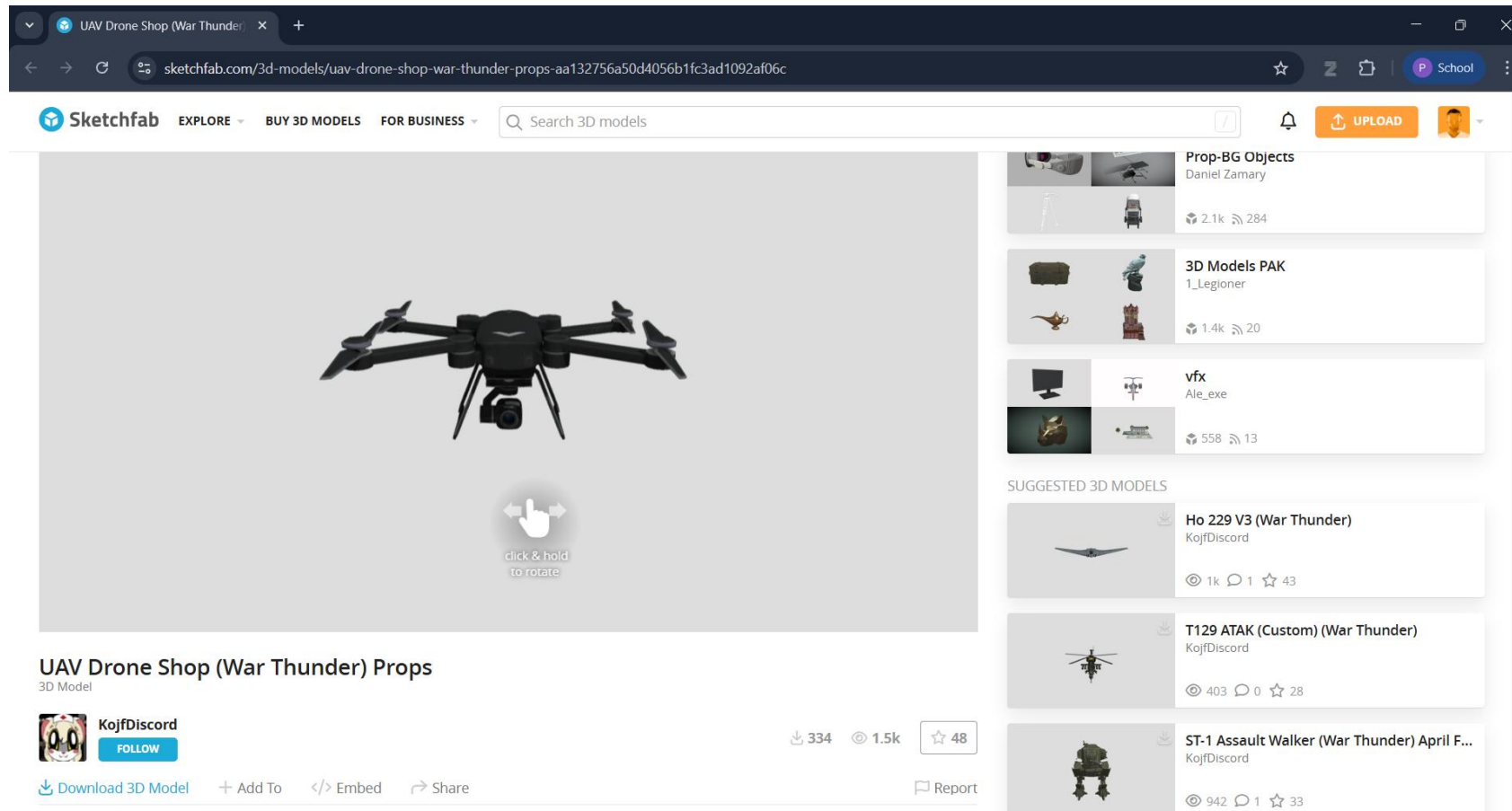
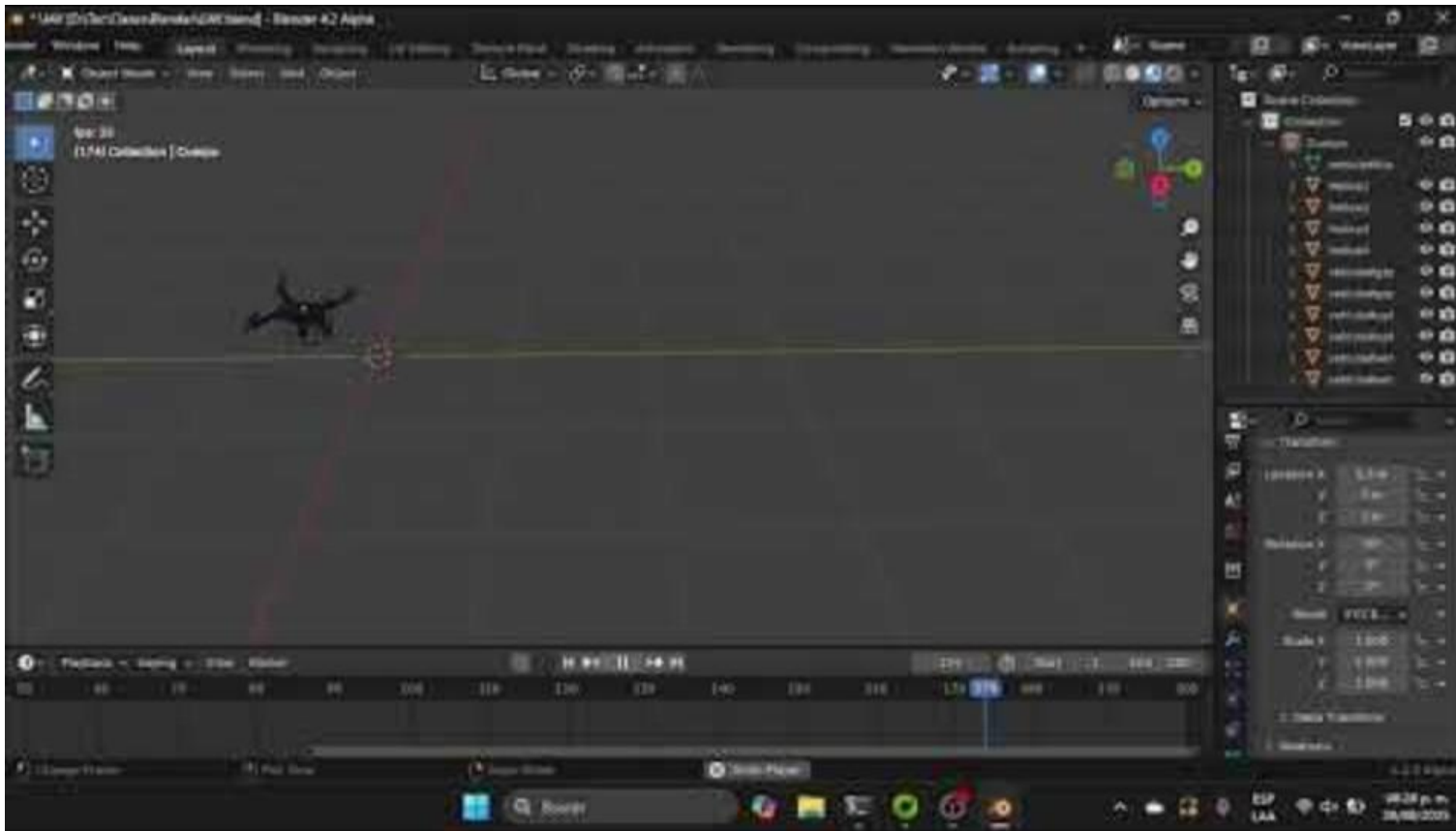


Drone Simulation Projects Across Different Platforms



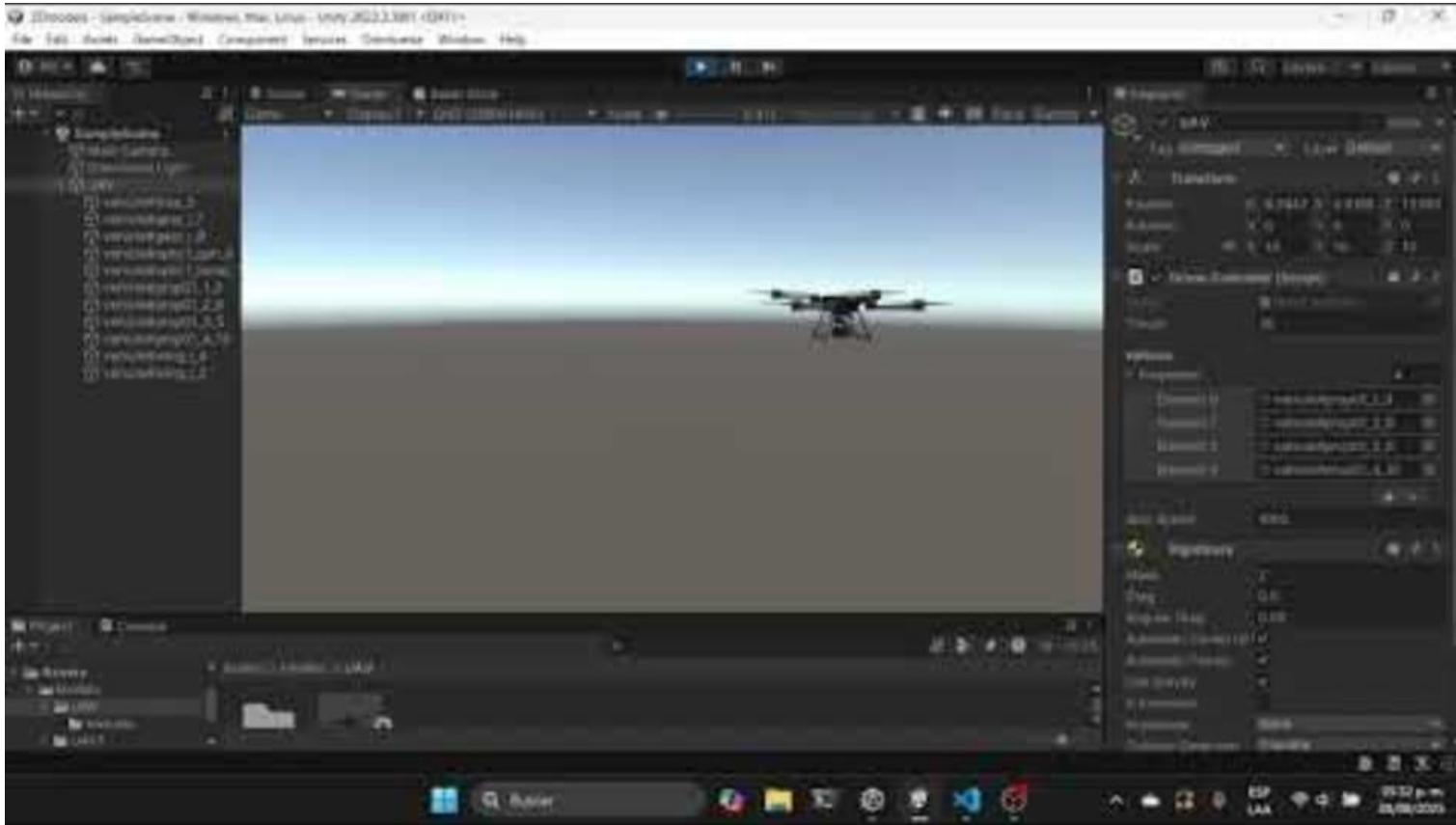
Sketchfab

Sketchfab: an online platform for sharing and downloading interactive 3D models.



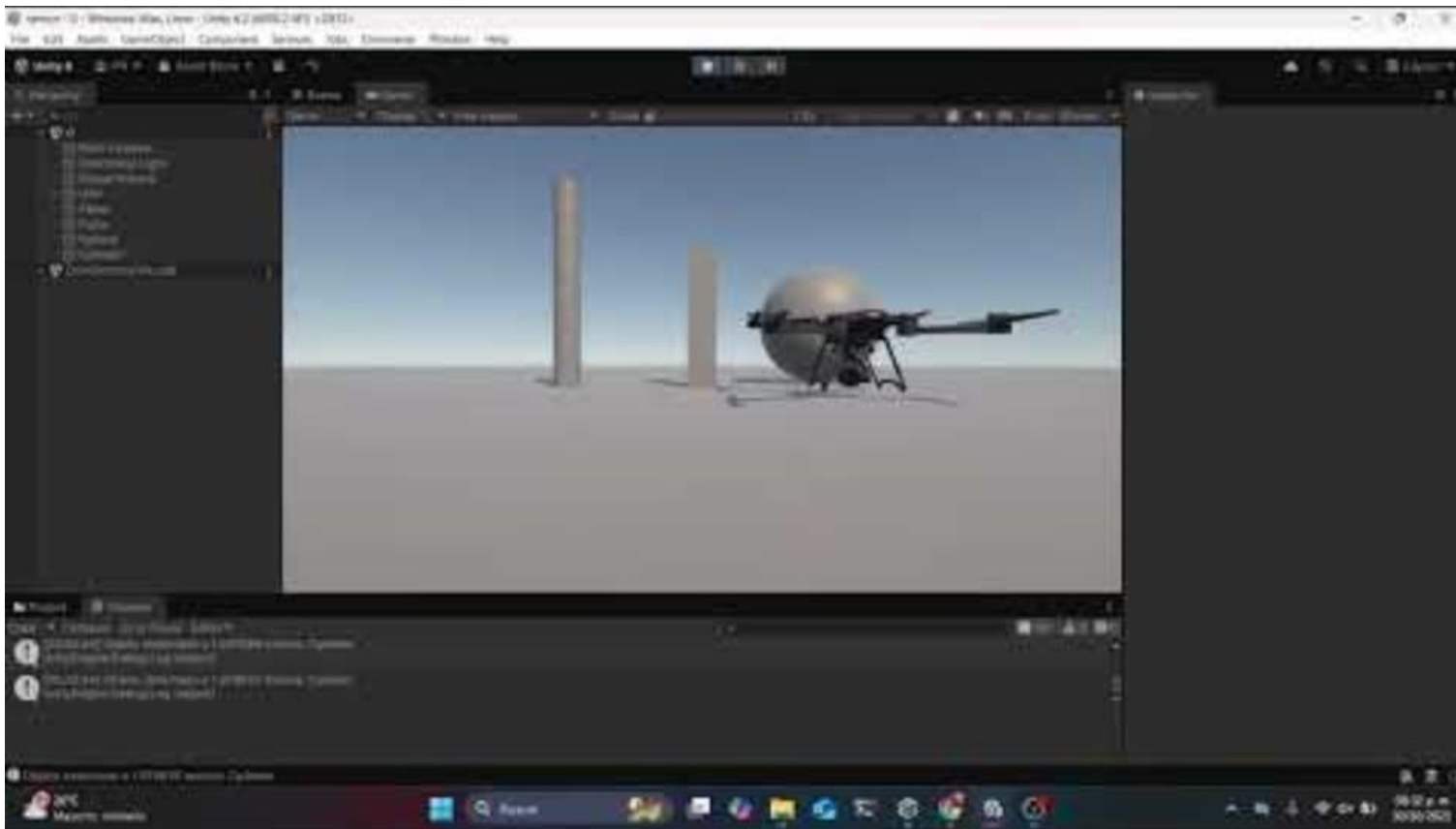
3D Drone Model - Blender

- Animation of the drone flying in a square path
- Programmed using a Python script
- Focused on visualizing basic flight motion



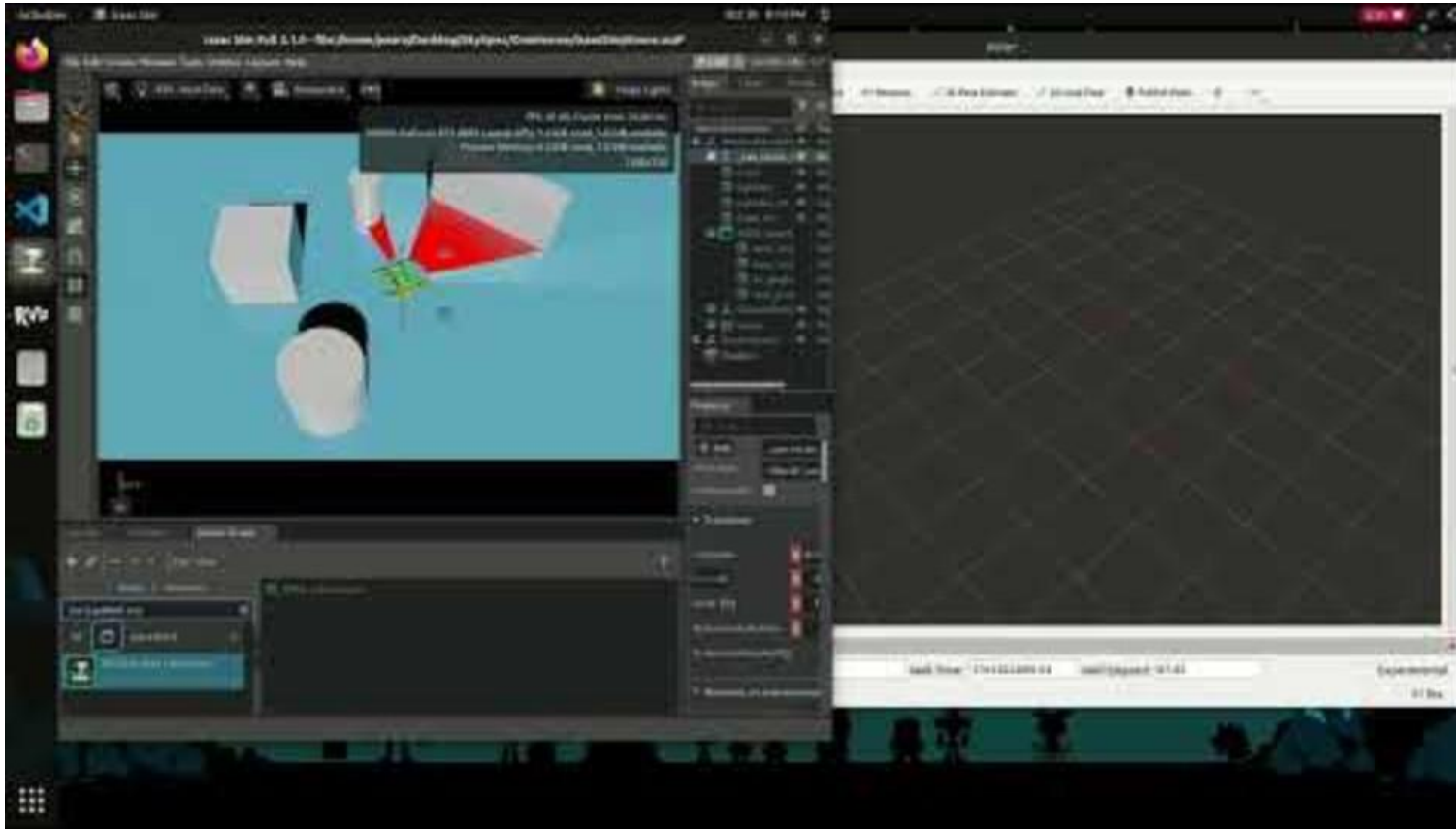
3D Drone Model - Unity

- Controlled with W, A, S, D keys (movement)
- Space bar for take-off
- Simple real-time interaction
- Programmed using a Python script



Lidar Sensor - Unity

- Added 2 m range proximity sensor (simulation)
- Detects nearby obstacles
- Demonstrates basic sensing behavior



Lidar Sensor - Isaac Sim

- Imported the same UAV model into Isaac Sim
- Added a rotating LiDAR sensor
- Connected to ROS 2 for real-time data publishing
- Visualized point cloud data in Rviz
- Shows realistic simulation and robot communication