

# GPIP Presentation

Creating GUIs: Visualization of drone routes recharged by ground vehicles

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# Motivation

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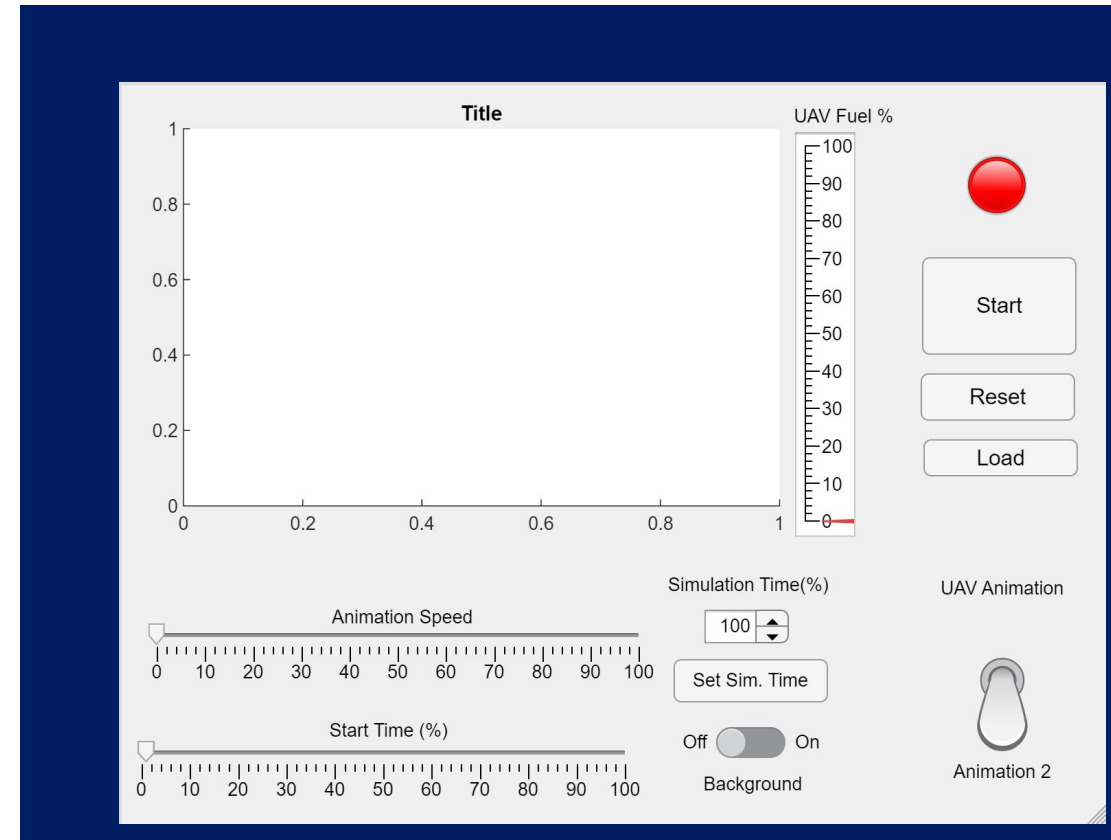
- ❑ Create a GUI to help visualize various UAV and UGV routes.



# 1st application

# Original Design

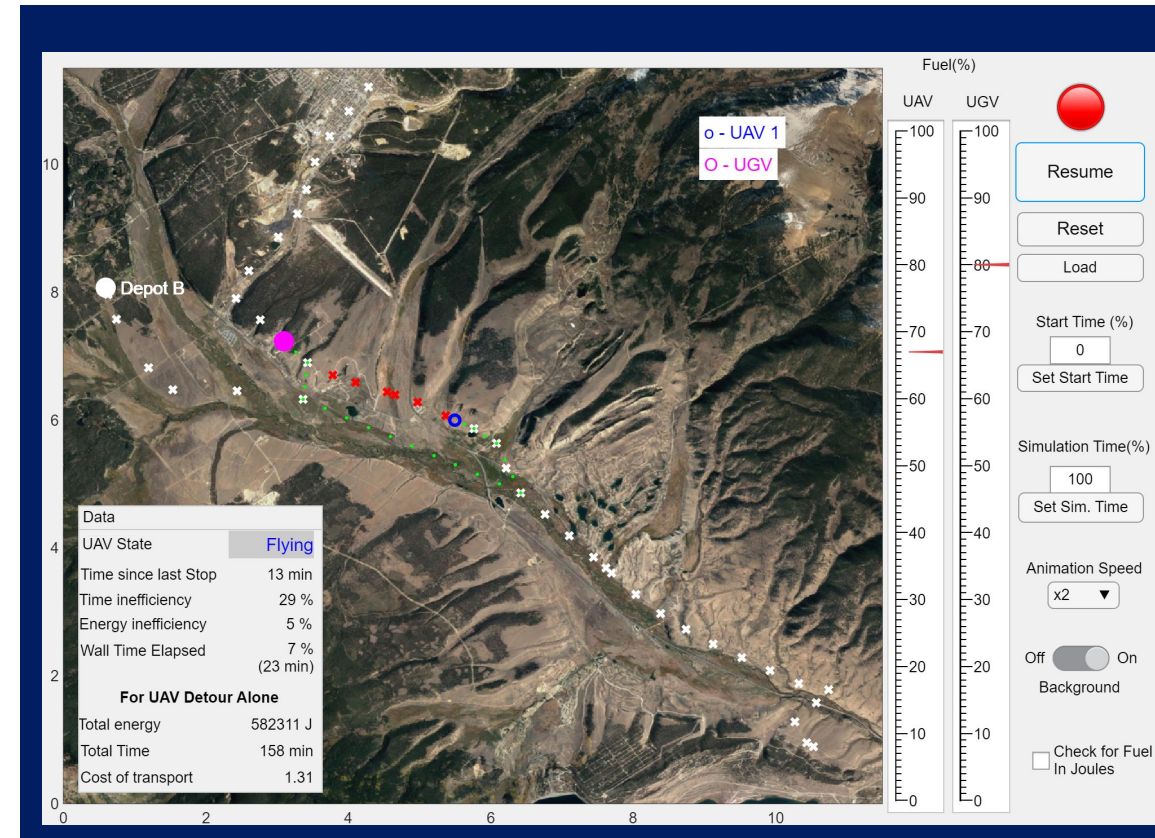
- ❑ Play/Stop/Resume Toggle Button
- ❑ Switch Animation Toggle
- ❑ Reset Button
- ❑ UAV Fuel % gauge
- ❑ Lamp
- ❑ Animation Speed Slider
- ❑ Start Time Slider
- ❑ Simulation Time
- ❑ Background Switch





# Final Design

- ❑ Changed Start time slider to edit box
- ❑ Changed Animation to Drop down Box
- ❑ UGV Fuel gauge
- ❑ Check box changes Joules/% fuel
- ❑ Added Panel (Displays Route Data)
- ❑ Fully functioning background and load function

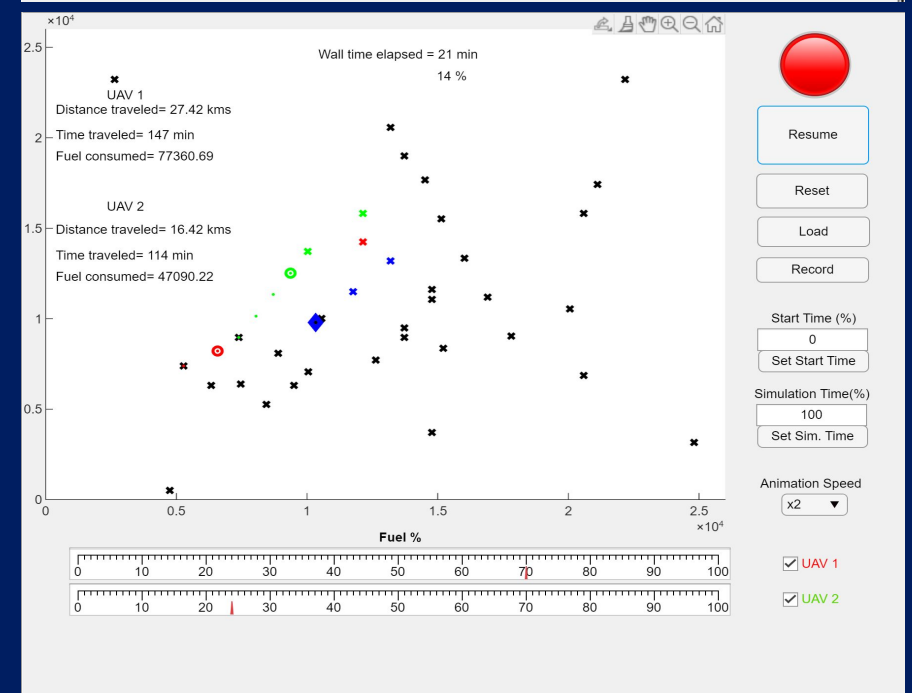
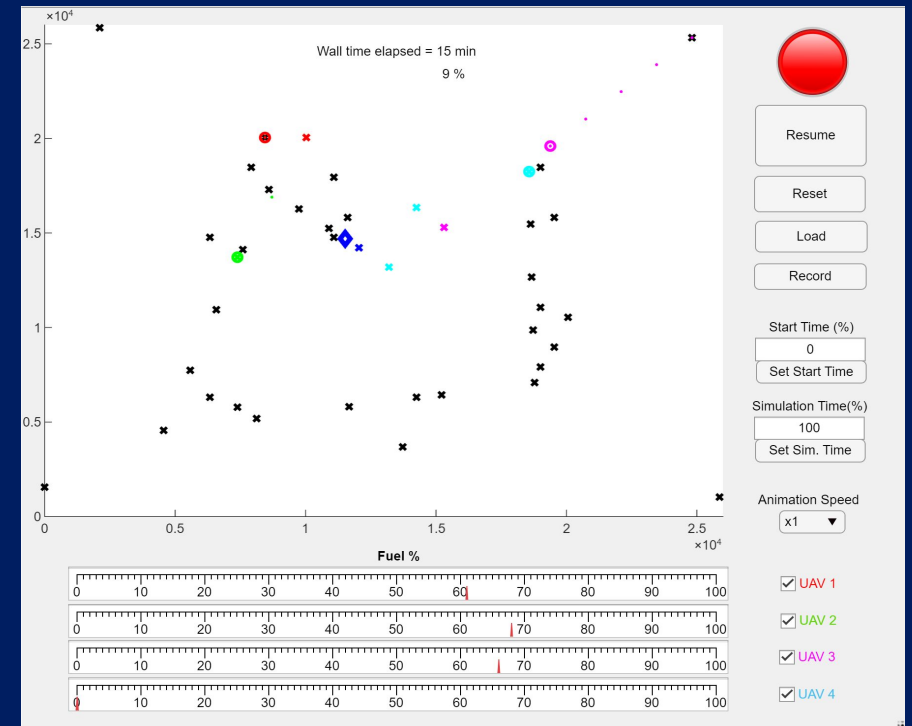




# 2nd application

# Design

- Up to 4 UAVS
- Loads different scenarios
- Checkboxes (toggles what uav wants to be showed)
- Displays UAVs Route data
- Only shows data for corresponding number for UAVs



# Helpful Tools

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- ☐ Youtube Videos
- ☐ Matlab Community Questions
- ☐ Google Search