

Dev Mode/Command-line Mode

<input type="checkbox"/> Initial Set
<input type="checkbox"/> Time Horizon
Must be an Integer ≥ 0
<input type="checkbox"/> Probability Recorded percentage of simulation steps
<input type="checkbox"/> Log Uncertainty Interval between log entries

<input type="checkbox"/> Log Must be a .lg file.
<input type="checkbox"/> Mode <ul style="list-style-type: none"> • equation • ann
<input type="checkbox"/> Model <ul style="list-style-type: none"> • equation → points to a .json file. • ann → points to a .h5 file.
<input type="checkbox"/> States
<input type="checkbox"/> Safety-Constraints Must point to a .json file.

Behavior

Get random trajectories

Log Generation

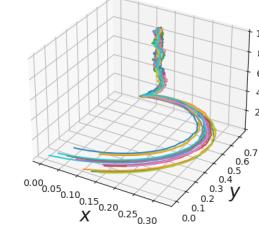
Check if the random trajectories are valid

Check Safety

Check trajectory safety

Check log safety

Behavior Output



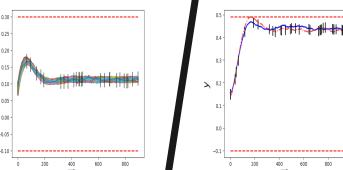
Plot showing behavior of system.

Log Generation Output

```
t=0: [[-0.000580, 0.019420], [0.065222, 0.085222]]
t=8: [[0.036696, 0.056696], [0.074716, 0.094716]]
t=47: [[0.156858, 0.176858], [0.201596, 0.221596]]
t=62: [[0.171364, 0.191364], [0.258984, 0.278984]]
t=106: [[0.170183, 0.190183], [0.397926, 0.417926]]
t=145: [[0.137241, 0.157241], [0.456199, 0.476199]]
t=194: [[0.194547, 0.124547], [0.466648, 0.486648]]
t=203: [[0.195039, 0.125039], [0.462601, 0.482601]]
t=216: [[0.099536, 0.119536], [0.457786, 0.477786]]
t=277: [[0.096577, 0.116577], [0.432629, 0.452629]]
```

.lg file

Safety Check Output



Plot showing safe trajectories.

Plot showing unsafe trajectory.

Safe or Unsafe