

# Engineering Notes No. 14.1

## INFORMATION

**NAME:** William Reimer

**DATE:** 04/16/25 - 04/24/25

**Sprint:** 14

## JIRA BACKLOG

### **Responsible for:**

Uploading and testing ERAU campus map in Scenic-SUMO

### **Contributed to:**

Exploring falsifier examples and documentation

## RESOURCES &amp; DOCUMENTS CONTRIBUTED TO

**Table 1 - Contributions**

Date	Resource/Document	Location	Contribution Description
04/21/25	Scenic-SUMO Demo Map	Scenic-SUMO	Uploaded and displayed a map of ERAU in Scenic- SUMO

## COMPONENTS TESTED

*Table 2 - Testing*

Date Tested	Component	Result	Comments
04/21	Scenic-SUMO ERAU Map	Success	Successfully uploaded and demonstrated campus map

## PROBLEMS SOLVED

*Table 3 - Solutions*

Date	Problem	Solution & Notes
04/21	Scenic-SUMO ERAU Map: Was not loading	Was able to get the map to load by running as bare-bones of a frame as possible, then building from there

## PROBLEMS TO ADDRESS NEXT

*Table 4 - Future Problems*

Problem	Description
N/A	N/A

## MEETING NARRATIVE NOTES:

*Table 5 - Meeting 1*

MM/DD/YY	Meeting Type: StandUp/Class/ETC	
Met with Product Owner(s): Y/N		
Problems Brought Up:		
Problem	Proposed Solution	
VerifAI falsifier failed to load	Deprecated np.float fixed by using float, resolved by Serena	
Other Items Updated on:		
N/A		
Additional Notes:		
N/A		

*Table 6 - Meeting 2*

MM/DD/YY	Meeting Type: StandUp/Class/ETC	
Met with Product Owner(s): Y/N		
Problems Brought Up:		
Problem	Proposed Solution	
Was unable to show ERAU Campus Map	Was able to demonstrate it to group	
Other Items Updated on:		
N/A		
Additional Notes:		
N/A		

<b>Table 7 - Meeting 3</b>	
<b>MM/DD/YY</b>	<b>Meeting Type: StandUp/Class/ETC</b>
Met with Product Owner(s): Y/ <b>N</b>	
<b>Problems Brought Up:</b>	
<b>Problem</b>	<b>Proposed Solution</b>
<b>Other Items Updated on:</b>	
Presentation day	

**NOTES:**

Unedited Notes:

04/17

Met in MP 224, Serena is looking to modify the source code of VerifAI

Potential issue within falsifier.py with numpy

We want to falsify the NN detecting cones and the hybrid controller.

Issue with np.float, removed np (leaving it as just float) seemed to fix it.

Serena resolved the issue with falsifier not loading. Issue was due to deprecated use of numpy np.float!!!

04/22

Meeting in the micaplex

Need to learn how to make a falsifier

Looked at VerifAI/examples/scenic/falsify\_distance.py at main · BerkeleyLearnVerify/VerifAI · GitHub\

CS491 - Autonomous Vehicle Design

Basic Usage - VerifAI documentation\

Colloquium Talk

Currently an issue with the file path.

04/24

Poster presentations