

Engineering Notes No. 14.1

INFORMATION

NAME: Davian Rosario-Ortiz

DATE: 04/16/25 - 04/22/25

Sprint: 14

JIRA BACKLOG

Responsible for:

- Assisting with debugging VerifAI's falsifier functionality
- Supporting test path and scenario integration in ScenicSUMO
- Learning VerifAI falsifier generation techniques via examples and documentation.

Contributed to:

- Resolving numpy deprecation error in VerifAI (`np.float -> float`).
- Troubleshooting path-related issues in `falsifier_distance.py`
- Reviewing GitHub documentation and examples for implementation strategies.

RESOURCES & DOCUMENTS CONTRIBUTED TO

Table 1 - Contributions

Date	Resource/Document	Location	Contribution Description
04/17/2025	VerifAI Source (falsifier.py)	MP 224	Identified and resolved deprecated numpy float usage.
04/17/2025	Scenic/VerifAI integration	MP 224	Updated path settings for scenario and map references.
04/22/2025	VerifAI documentation overview	GitHub + One Drive	Researched how to create and configure falsifiers.

COMPONENTS TESTED

Table 2 - Testing

Date Tested	Component	Result	Comments
04/17/2025	Falsifier.py	Fixed	Float error resolved, file now executes
04/22/2025	Falsifier_distance.py	In-progress	Path Issues currently under investigation.

PROBLEMS SOLVED

Table 3 - Solutions

Date	Problem	Solution & Notes
04/17/2025	VerifAI float type error (np.float)	Changed to Python's native float, removed deprecated usage.
04/17/2025	Falsifier not loading	Issue traced to numpy deprecation, resolved by Serena.

PROBLEMS TO ADDRESS NEXT

Table 4 - Future Problems

Problem	Description
Path configuration	Correct file paths for map and scenario input falsifier_distance.py
Falsifier functionality	Learn and implement valid falsifier use cases through VerifAI examples.
Falsifier Customization	Adapt distance-based falsifier to project-specific simulation needs.

MEETING NARRATIVE NOTES:

Table 5 - Meeting 1

04/17/2025	Meeting Type: In-Class (MP-224)	
Met with Product Owner(s): N		
Problems Brought Up:		
Problem	Proposed Solution	
Falsifier not running	Identified and fixed deprecated numpy usage	
Scenario path issues	Modify path variables in script accordingly	
Other Items Updated on:		
VerifAI source review and debugging		
Additional Notes:		
Issue related to "color of the broken" was unclear, likely mislabel or debug string.		

Table 6 - Meeting 2

04/22/2025	Meeting Type: In-Class (MP 224)	
Met with Product Owner(s): N		
Problems Brought Up:		
Problem	Proposed Solution	
Falsifier path not resolving	Investigating and testing correct path formatting.	
Other Items Updated on:		
Reviewed GitHub and documentation for falsifier implementation guidance.		
Additional Notes:		

- Planning continued testing and implementation of falsifier within Scenic-Sumo

NOTES: