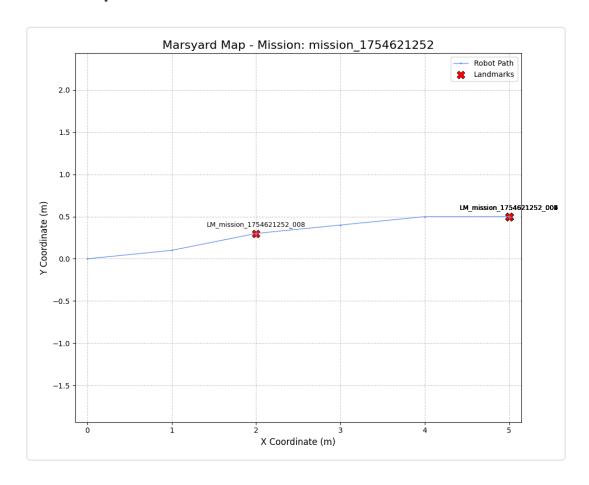
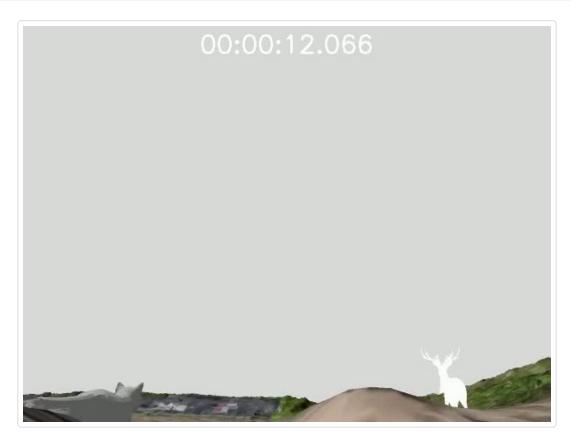
# ERC 2025 Mission Report: mission\_1754621252

## **General Findings**

- Total Landmarks Found: 9
- **Mission Summary (LLM):** Mission summary by LLM (implementation with Gemini pending).

## **Mission Map**

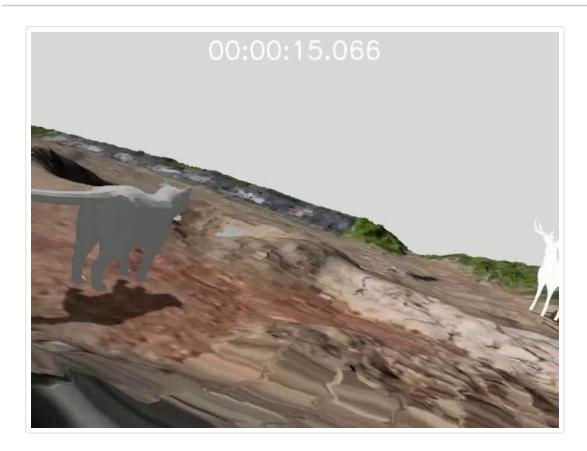




- Name/Category: Digital graphical asset: Deer silhouette
- **Detailed Visual Description:** > The object is a stark white, two-dimensional silhouette of an Earth-based deer, complete with prominent antlers, rendered against a simulated planetary landscape. Its distinct form and lack of environmental integration (e.g., shadows, texture) strongly indicate it is a graphical overlay or element within a digital environment, not a physical object.
- Martian Contextual Analysis: > Probable origin: This object is unequivocally not natural to Mars. Its appearance as a clean, white silhouette strongly indicates it is a digital graphical asset, likely originating from a terrestrial simulation, game, or conceptual rendering. It is entirely anomalous if presented as a genuine observation from a Mars mission. > Potential utility: As a digital artifact, this object holds no practical utility for current or future Mars rover missions or base operations. Its function is confined to the simulated environment from which the image originates. > Relevance/Importance: In the context of actual Mars exploration, this finding, if misinterpreted as a real object, would be of revolutionary scientific importance, suggesting complex extraterrestrial life. However, recognizing it as a digital asset, its relevance to Mars exploration is null. Its primary importance is to highlight that the

image itself is not a genuine Mars observation. > - Dangers/Considerations: There are no physical dangers associated with this digital object. The primary consideration is the critical need to prevent misidentification and ensure accurate reporting, as presenting such an image as a genuine Mars observation could lead to significant scientific and public misinformation.

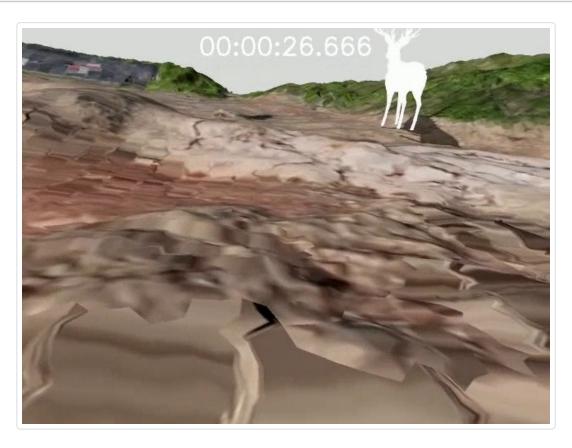
#### • Estimated Location (Robot Pose):



- Name/Category: 3D Rendered Feline Model
- **Detailed Visual Description:** > A grey, low-polygon 3D model resembling a domestic cat, depicted standing on a textured, brownish-green simulated terrain. The model casts a distinct shadow. A timestamp "00:00:15.066" is visible in the upper right, and a white, low-polygon ungulate figure (possibly a deer) is partially visible in the background, further suggesting a computer-generated environment.
- Martian Contextual Analysis: > Probable origin: This object is unequivocally a component of a simulated or computer-generated environment, likely a screenshot from a video game, a 3D rendering software, or a non-scientific simulation. It is not a natural formation on Mars, nor is it debris or equipment from any known past or current Mars exploration mission. It is an anomalous image in the context of genuine Martian data. > Potential utility: As a simulated image, this object possesses no physical utility for current or future Mars missions or bases. Its only potential "utility" would be as a test image for data processing algorithms or as an example of non-Martian data for training purposes in image authentication. It holds no value for scientific or operational planning on Mars. > Relevance/Importance: This finding is of no scientific or operational significance to Mars exploration, as it does not represent a real object on the Martian

surface. Its primary relevance is to highlight the critical importance of data source verification and authentication in planetary science to prevent misinterpretation and resource misallocation. > - Dangers/Considerations: There are no physical dangers associated with this object as it does not exist on Mars. The primary consideration is the risk of misidentification and the potential for diverting resources to investigate a non-existent anomaly if not correctly identified as a simulated image.

#### • Estimated Location (Robot Pose):



- Name/Category: Digital rendering of a cervid silhouette within a simulated environment
- Detailed Visual Description: > The image displays a white, stylized silhouette resembling a deer or similar cervid, positioned on a digitally rendered, uneven terrain. The terrain exhibits textures and forms consistent with a simulated landscape, not actual Martian geology. In the background, green, undulating hills and artificial structures are visible. A digital timestamp "00:00:26.666" is present at the top. The overall visual quality suggests a computer-generated image, likely from a video game or 3D modeling environment.
- Martian Contextual Analysis: > Probable origin: This object is unequivocally not a physical entity on Mars. It is a digital artifact, likely originating from a computer simulation, video game, or 3D rendering software. The presence of non-Martian features such as green vegetation and artificial structures, along with a digital timestamp, strongly indicates an Earth-based digital source. It is completely anomalous in the context of actual Mars imagery. > Potential utility: As a digital artifact, this "object" has no direct utility for a physical Mars rover mission or future Martian bases. Its utility is confined to the context of the simulation it belongs to, potentially as a visual

element or environmental detail within that specific digital program. It could be useful for understanding the source of the image if it is part of a mission simulation or training program, but not as a physical object. > - Relevance/Importance: This finding is of no relevance or importance to actual Mars exploration. It represents a misidentification of a digital image as a physical object on Mars. Its primary importance lies in highlighting the critical need for robust image authentication and source verification protocols to distinguish between genuine mission data and unrelated digital content. > - Dangers/Considerations: There are no physical dangers associated with this digital artifact. The primary consideration is the potential for misinterpretation or confusion if such images are not correctly identified as simulations or non-mission-related content. It underscores the importance of verifying the provenance of all imagery claimed to be from Mars.

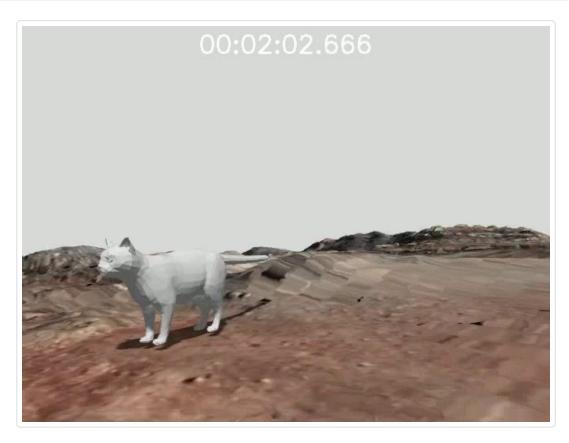
#### • Estimated Location (Robot Pose):



- Name/Category: Deer Silhouette
- **Detailed Visual Description:** > The object presents as a uniformly white, two-dimensional silhouette resembling a terrestrial male deer (stag) with prominent antlers. It is positioned against a background that appears to be a digitally rendered landscape, featuring varied terrain with brown, grey, and anomalous green hues, inconsistent with typical Martian geology. A digital timestamp "00:01:15.066" is visible in the upper right corner, indicating the image is likely a frame from a video or a simulation. The object lacks any natural texture, shading, or three-dimensionality, strongly suggesting an artificial, non-physical origin.
- Martian Contextual Analysis: > Probable origin: The object's appearance, including its perfect silhouette, uniform color, resemblance to terrestrial fauna, and the presence of a digital timestamp, makes a natural Martian origin highly improbable. It is most likely a digital artifact, such as a test pattern, a placeholder graphic, or an overlay within a simulation, a visual processing system, or a display interface being utilized or tested on Mars. It could also be a remnant or a visual representation from a past mission's testing or calibration phase. > Potential utility: If a digital artifact, its utility lies in its potential role as a calibration target for optical systems, a test pattern for object recognition

algorithms, or an indicator of specific software functionality or display modes. Understanding its purpose could aid in validating the performance of imaging and data processing systems. If it were a physical object (highly unlikely given its appearance), its utility would be negligible unless it contained internal components. > - Relevance/ Importance: The primary importance of this finding is to ascertain its true nature and origin. If it is a digital anomaly, it highlights the need for robust protocols for distinguishing between genuine Martian features and system-generated artifacts, ensuring data integrity and preventing misinterpretation. If it were to be a physical object, its presence would be profoundly anomalous and require immediate, highpriority investigation as a potential terrestrial artifact or an unprecedented discovery. Given its visual characteristics, it is currently assessed as a low-priority anomaly, likely related to software or display. > - Dangers/Considerations: No immediate physical dangers are associated with the object itself, given its likely digital or two-dimensional nature. The main consideration is the potential for misinterpretation or distraction from primary mission objectives if its origin is not quickly and accurately determined. It could signify a software glitch, a data corruption issue, or an intentional but undocumented test pattern. Further investigation is required to confirm its nature and rule out any implications for data integrity or system performance.

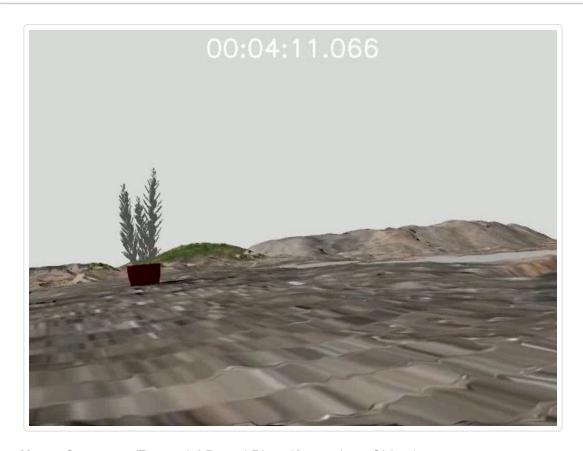
#### Estimated Location (Robot Pose):



- Name/Category: Low-polygon 3D rendered feline model
- **Detailed Visual Description:** > A white, low-polygon three-dimensional model resembling a domestic cat, positioned on a reddish-brown, rocky, and uneven terrain. The scene appears digitally rendered, with a visible timestamp "00:02:02.666" in the upper portion of the image, strongly suggesting a computer-generated environment rather than a direct photographic capture from Mars.
- Martian Contextual Analysis: > Probable origin: This object is unequivocally not a natural Martian formation nor an artifact from any known Mars exploration mission. Its appearance, particularly the low-polygon rendering and the presence of a digital timestamp, indicates it is a computer-generated asset within a simulation, game, or visualization environment. It is an image artifact, not a physical object on Mars. > Potential utility: As a digital artifact within an image, this object possesses no physical utility for current or future Mars rover missions or potential bases. Its only "utility" is within the context of the simulation it originates from, potentially serving as a test asset for rendering, animation, or environmental interaction within a virtual Martian landscape. > Relevance/Importance: This finding holds no scientific or exploratory significance for actual Mars exploration. It does not represent a discovery on the

Martian surface. Its relevance is limited to illustrating the distinction between real mission data and simulated or artistic representations, emphasizing the need for rigorous data authentication. > - Dangers/Considerations: There are no physical dangers or operational considerations associated with this object, as it does not exist on Mars. The primary consideration is the potential for misinterpretation or public confusion if the image's simulated origin is not clearly communicated, leading to false claims about discoveries on Mars.

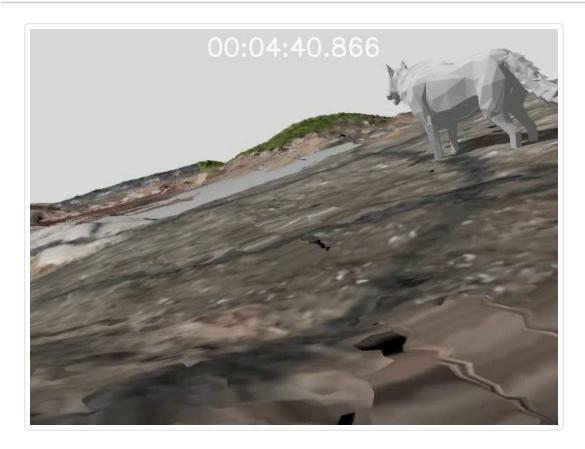
#### • Estimated Location (Robot Pose):



- Name/Category: Terrestrial Potted Plant (Anomalous Object)
- Detailed Visual Description: > The object is a distinct, terrestrial-looking plant, possibly a conifer or similar evergreen species, characterized by multiple upright stems or trunks with dense foliage, contained within a rectangular, reddish-brown pot. The plant appears to be a mature specimen, suggesting it has been growing for some time. It is situated on a textured, uneven surface resembling Martian regolith, with distant geological formations (hills/mountains) under a light grey sky. The object's form and composition strongly indicate a manufactured item, not a natural Martian geological or biological formation.
- Martian Contextual Analysis: > Probable origin: This object is unequivocally not natural to Mars. Its presence indicates an artificial origin. It could be a remnant from an unrecorded terrestrial mission, potentially a test article or a component of a long-duration habitat experiment. Alternatively, given its pristine appearance and the digital timestamp, it could be an artifact from a simulation, a training exercise, or an artistic rendering intended to visualize future Martian habitats or terraforming efforts, rather than a direct observation from a current mission. If genuinely found on Mars, it would imply a prior, unacknowledged human presence or an extraterrestrial intervention. > -

Potential utility: If this object were genuinely found on Mars and viable, it would represent an unprecedented biological finding. Its potential utility would be immense for astrobiology, demonstrating the feasibility of complex plant life in a Martian environment (if it grew there) or the successful transport and maintenance of terrestrial life. It could serve as a direct resource for future human bases (e.g., oxygen production, food, psychological well-being) or as a subject for biological research into adaptation and terraforming. However, its immediate utility for a robotic rover is limited beyond observation and sampling. > - Relevance/Importance: The discovery of a potted plant on Mars would be one of the most significant findings in the history of space exploration, fundamentally altering our understanding of Mars's past or present habitability, the history of space exploration, or the existence of extraterrestrial intelligence. It would necessitate immediate and extensive investigation, potentially triggering a paradigm shift in scientific and public perception of Mars. > - Dangers/ Considerations: The primary consideration is the potential for biological contamination if the plant is terrestrial and viable, posing a risk to the pristine Martian environment. Conversely, if it harbors unknown Martian microorganisms, it could pose a biohazard to Earth samples. There are also significant logistical challenges in handling and preserving such an object. Furthermore, the implications of its origin (e.g., unacknowledged missions, extraterrestrial contact) would require careful and sensitive management. The most immediate "danger" is misinterpretation if the image is not from a real Martian observation.

#### • Estimated Location (Robot Pose):



- Name/Category: Digital 3D Model of a Canid (Wolf)
- **Detailed Visual Description:** > A low-polygon, white, three-dimensional rendering of an animal resembling a wolf, positioned on a digitally textured terrain. The figure appears to be an artificial construct within a simulated environment, not a physical object. The image includes a timestamp, further suggesting a digital capture from a simulation or game.
- Martian Contextual Analysis: > Probable origin: The object is not a physical entity on Mars. It is a digital artifact, likely a 3D model rendered within a computer simulation, video game, or visualization software. The image itself appears to be a screenshot from such a digital environment, indicated by the polygonal nature of the "wolf" and the generic terrain textures, as well as the timestamp overlay. > Potential utility: As a digital rendering, this "object" has no physical utility for current or future Mars missions or bases. Its presence in this image suggests the image itself might be from a simulation used for mission planning, training, or public outreach, where such models could represent elements within a virtual environment. > Relevance/Importance: This finding is not relevant to actual Mars exploration as it does not represent a physical object on the Martian surface. Its significance lies solely in the context of the image's

origin, indicating it is a simulated scene rather than a genuine observation from a Mars rover or orbiter. > - Dangers/Considerations: There are no physical dangers or considerations as the object is not real. The primary consideration is to correctly identify the image as a simulation or rendering to avoid misinterpreting it as a genuine discovery on Mars.

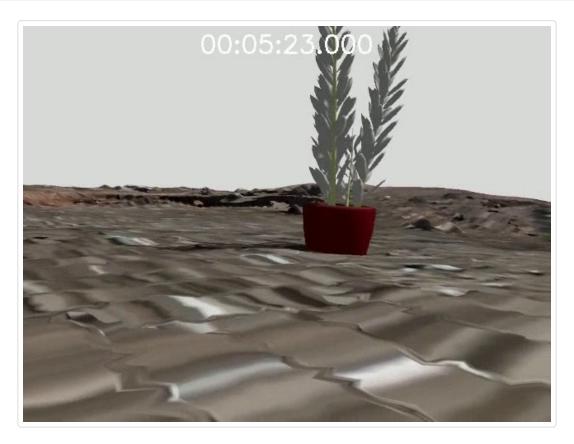
#### • Estimated Location (Robot Pose):



- Name/Category: Simulated Low-Polygon White Wolf Figure
- **Detailed Visual Description:** > A large, white, angular (low-polygon) figure resembling a wolf stands on a textured, brownish-grey surface. A small, red, geometric object is visible beneath its belly. The background includes a low, flat-topped hill. A timestamp "00:05:02.000" is present in the upper right. The overall appearance strongly suggests a computer-generated or simulated environment.
- Martian Contextual Analysis: > Probable origin: This object is unequivocally artificial and not natural to Mars. Its low-polygon rendering and the presence of a timestamp strongly indicate it is a graphical element from a digital simulation, a video game, or a visualization software. It is highly improbable that such an object exists physically on Mars. > Potential utility: As a simulated or graphical artifact, this object has no physical utility for a real rover mission or future base on Mars. Its presence in an image, however, serves as a critical indicator of a potential malfunction, misconfiguration, or intentional overlay within the imaging system, data processing pipeline, or visualization software used for Mars mission data. > Relevance/ Importance: This finding is highly significant, not due to the object itself, but because its appearance in an image presented as "from Mars" implies a critical error in data

acquisition, transmission, processing, or display. It is paramount to determine the source and context of this anomaly (e.g., test image, corrupted data, software bug, simulation overlay) to maintain the scientific integrity and reliability of all mission visual data. > - Dangers/Considerations: The primary danger is misinterpretation and compromise of data integrity. Mistaking this image for a real depiction of Mars could lead to erroneous scientific conclusions or misallocation of mission resources. Immediate action is required to verify the image's source and context, investigate any potential software glitches or data corruption, and implement measures to prevent similar anomalies in future mission data. There are no physical dangers associated with the object itself.

#### • Estimated Location (Robot Pose):



- Name/Category: Simulated Red Pot with Plant
- **Detailed Visual Description:** > A red, cylindrical pot containing a plant with multiple greyish-green, elongated, vertically arranged leaf-like structures. The object rests on a textured, brownish-grey terrain, likely a simulated Martian landscape, under a light grey sky. A digital timestamp "00:05:23.000" is visible, indicating a rendered or recorded environment.
- Martian Contextual Analysis: > Probable origin: Not natural to Mars. Not from any known past or current Mars mission. The digital timestamp and rendered appearance strongly indicate this is a simulated object within a digital environment (e.g., video game, scientific visualization, training simulation), not a physical object on Mars. > Potential utility: No utility for actual Mars rover missions as it is not a real object. Within its simulated context, it could serve as a visual element, a target for interaction, or a representation of future goals like Martian habitation or terraforming. > Relevance/ Importance: If this were a real discovery on Mars, it would be of paramount scientific importance, representing the first macroscopic life found beyond Earth and revolutionizing astrobiology. However, as a simulated object, it holds no direct relevance to actual Mars exploration findings. > Dangers/Considerations: No physical

dangers or special considerations for actual Mars missions, as it is a simulated artifact. If it were real, significant planetary protection protocols and ethical considerations regarding extraterrestrial life would apply.

#### • Estimated Location (Robot Pose):