



Capabilities Statement

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AgileView's Synthetic Data Platform, through its provision of synthetic geospatial data, has been a cornerstone in the enhancement of machine learning platforms, particularly in refining the effectiveness and efficiency of object detection and related processes. The platform's capabilities were successfully leveraged to meet the specific requirements of projects like the Video LINCS program, which aimed to develop novel capabilities for autonomously re-identifying objects across diverse video sensor collections.

Key Features of AgileView's Platform Include:

- 1. End-to-End Data-Centric Platform:** AgileView offered a comprehensive solution for managing complex data sets, essential for diverse video sensor collections, simplifying the creation and assessment of datasets for object re-identification.
- 2. Comprehensive 3D Catalog:** The platform's extensive 3D catalog was instrumental in building realistic synthetic environments, enhancing the accuracy of re-identification algorithms.
- 3. Customizable Dataset Configuration and Generation:** The flexibility of AgileView's platform allowed for tailored datasets, a vital feature for fine-tuning re-identification algorithms under various conditions.
- 4. Automated Dataset Evaluation:** This feature streamlined the assessment of algorithms, enabling quantitative evaluations and facilitating rapid improvements.



5. **Procedural 3D World Generation:** The platform's ability to generate dynamic 3D worlds ensured that synthetic data closely mirrored real-world scenarios, providing a challenging environment for testing re-identification algorithms.
6. **Automated Pipeline and Advanced Annotation:** Rooted in real-world data, AgileView's pipeline and annotation tools significantly enhanced the realism and accuracy of the synthetic data, crucial for training and evaluating re-identification algorithms.
7. **Geo-Referenced Synthetic Images:** The inclusion of geospatially accurate synthetic images was essential for scenarios requiring precise geospatial information.
8. **Automatic Generation of Synthetic Geospatial Data:** This standout feature of AgileView efficiently addressed the bottleneck in acquiring labeled training data for machine learning algorithm deployment.

AgileView's Synthetic Data Platform represented a comprehensive and versatile solution, aligning perfectly with the requirements of advanced machine learning platforms for object detection and related processes. Its capabilities in dataset configuration, automation, and geospatial alignment facilitated the development of robust re-identification algorithms, marking a significant advancement in the field.