

# Public Area Management

# Mindtech DataOps platform - Training Data Analysis and Synthetic Data creation: Superior Al vision systems through Data Lifecycle Management





### **Summary**

## **Superior AI Model Performance in Complex Public Spaces**

One of the main challenges in creating vision training data for public spaces is the lack of images captured from appropriate viewpoints under the right environmental conditions.

Mindtech's Dolphin dataset analysis platform analyses existing real world training data and identifies bias, lack of diversity and sparsity of training data that impacts AI model performance.

Mindtech's Chameleon synthetic data creation platform resolves issues found through automated, multiple simulation runs across various weather and lighting conditions, with full control over camera position and camera type. Multiple cameras can simultaneously record the events, allowing the simulation of large areas with hundreds of cameras.

The additional cornercase training data created improves AI model performance and robustness

#### Mindtech Platform Benefits

- Support for 100's of cameras simultaneously capturing scenarios
- Full control over lighting conditions including brightness and temperature
- Unlimited digital human and vehicle assets to create real-world situations
- Behavioural simulator enables the play out of real-world scenarios
- Full privacy compliance with no PII infringement

#### **Mindtech Quick Facts**

- Dolphin Delivering up to 90% reduction in data costs with improved model performance
- Chameleon up to 10x faster creation of domainmatched, fully annotated vision images with no IP or privacy issues
- Training-ready data packs IP-safe, privacy-compliant, domain-specific, images and annotation data for rapid Al vision system development

