

July 31, 2024

Kudan Inc.

Semantic digital twin technology developed for public infrastructures

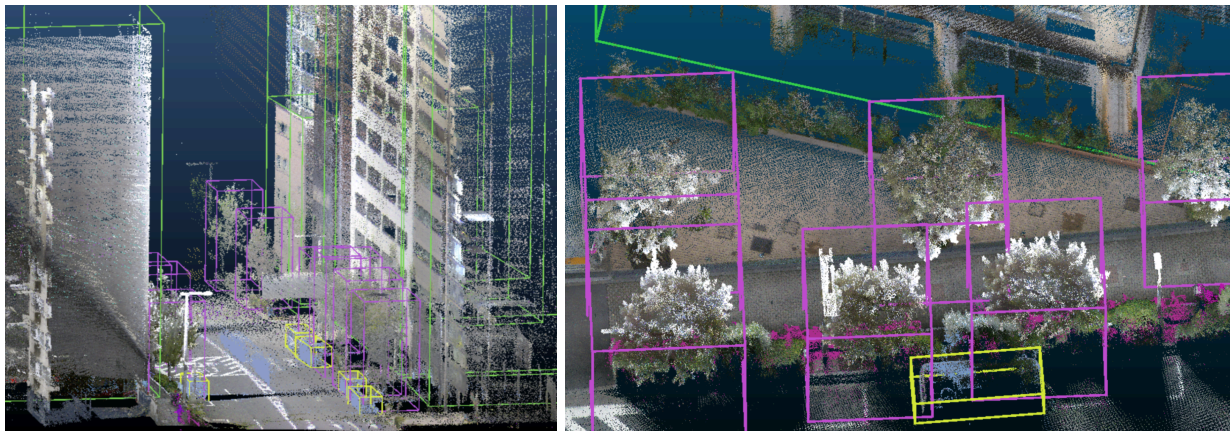
Kudan is pleased to announce that it has developed Semantic Digital Twin technology (*), a technology that enables the automatic detection of objects in 3D spatial digital twins, and will provide this technology for public infrastructure.

Until now, the automatic detection of objects in 3D data has been a major hurdle to the use of 3D data in asset management and maintenance using 3D spatial digital twins, as it is significantly less accurate and efficient than object recognition in general 2D data.

Kudan has now solved the fundamental problem of the lack of 3D training data required for the automatic detection of objects in 3D data by utilising its unique artificial perception technology and combining it with the latest AI models, thereby realising the semantics and object recognition of 3D spatial data, which until now has been insufficiently practical.

Such semantic digital twin technologies represent a revolutionary breakthrough for the digitisation of asset management and maintenance operations in a variety of environments, including urban, infrastructure, building and civil engineering and manufacturing industries. And demand is expected to rise in advance, particularly for public infrastructure, and will be available to the market from this fiscal year, including government projects that are under discussion.

Examples of semantic digital twin in public environments
(3D spatial digital twin and automatically detected structures and objects)



*Semantic means 'connotation', and Semantic Digital Twin refers to digital twin technology that combines spatial information with various connotative information attached to the space.

(Future outlook)

At present, this matter has no impact on the forecast for the current financial year, but if any facts arise that should be announced in the future, an announcement will be made as soon as possible.

About Kudan Inc.

Kudan is a deep tech research and development company specializing in algorithms for artificial perception (AP). As a complement to artificial intelligence (AI), AP functions allow machines to develop autonomy. Currently, Kudan is licensing its technology for next-generation solution areas such as digital twin, robotics and autonomous driving.

For more information, please refer to Kudan's website at <https://www.kudan.io/>.

■Company Details

Name: Kudan Inc.

Securities Code: 4425 (TSE Growth)

Representative: CEO Daiu Ko

■Contact Information

For more details, please contact us from [here](#).