

November 30th, 2021

Kudan Inc.

Kudan and Atos have signed business partnership agreement
Successful technology validation of handheld mapping at Atos Village
~ Joint development for productization of mapping devices
in civil engineering and construction fields~

Kudan Inc. (headquarters in Shibuya-ku; CEO Daiu Ko; hereafter “Kudan”), an artificial perception research and development company, is pleased to announce that Kudan has signed a business partnership agreement with Atos Co., Ltd. (headquarters in Saitama Prefecture; CEO Naoya Watanabe; hereafter “Atos”), a leading ICT-based construction company. Through this business partnership, we will combine Kudan’s SLAM technology with Atos’ extensive knowledge and its track records in introducing ICT technology at civil engineering and construction sites, aiming to innovate the entire lifecycle of “i-Construction*”, or “construction DX” which goes beyond existing DX in the construction industry.

(*This is an initiative by the Ministry of Land, Infrastructure, Transport and Tourism to improve the productivity of the entire construction production system and make construction sites more appealing.)



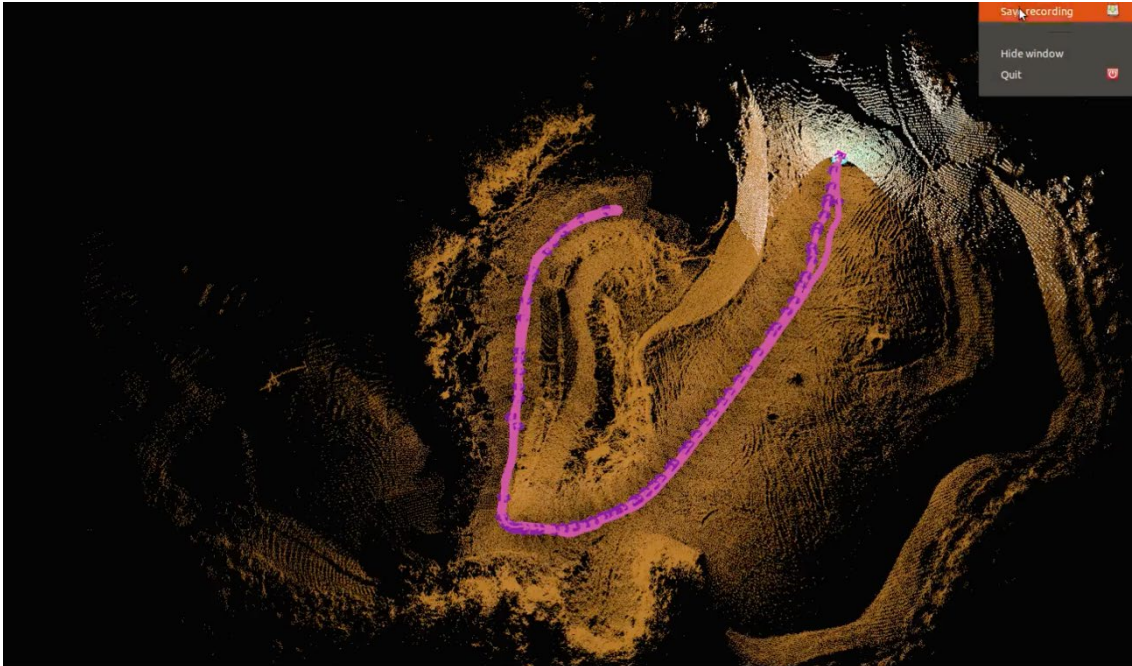
Prior to this business partnership, we have been jointly conducting technology validation of the handheld mapping device. 3D mapping has been promoted in the past for surveying and progress management at civil engineering sites, but the 3D scanners used for this purpose are expensive, and mapping and processing require expertise and a lot of time. On the other hand, a simple scanner device such as an iPad limits the field of application since it is difficult to achieve accuracy on its own and requires a device that can acquire highly accurate position data such as RTK-GNSS. Also, the short scanning range make it unsuitable for use in large-scale construction sites, mountain forests, and wide city areas. In response, Kudan and Atos have jointly conducted a technology validation of the handheld mapping device using Kudan’s Lidar SLAM at Atos Village (located in Shirakawa city, Fukushima Prefecture), which is a large-scale construction DX demonstration experiment and educational field owned by Atos, and succeeded in obtaining a highly precise, wide-area 3D map through data acquisition and

real-time processing. In addition, since this mapping device does not require GPS, we have been able to successfully acquire 3D maps in forested areas where GPS cannot be reached.

< Demo Video >

[Kudan Lidar SLAM: Mapping construction site with a simple handheld device](#)

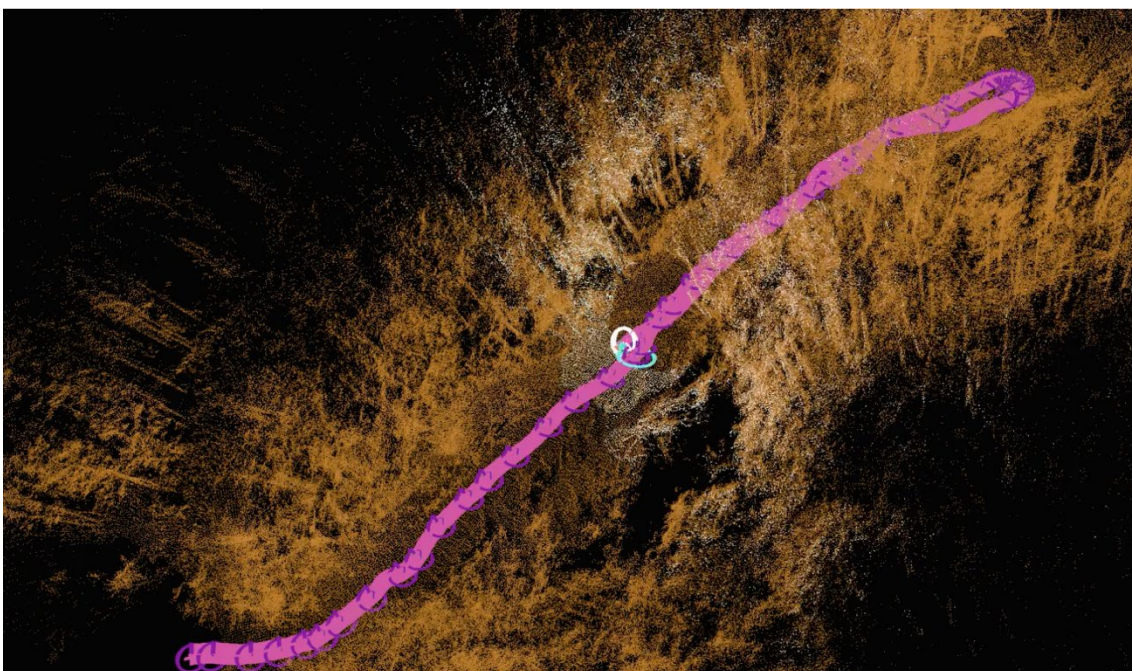
(Completed 3D map acquisition at Atos Village's DX construction yard of approximately 50,000 m² in five minutes with a round trip.)



< Demo Video >

[Kudan Lidar SLAM: Mapping a forestry area with a simple handheld device](#)

(Completed 3D map acquisition in three minutes with a round trip on the forest road at the DX Forest Tech Field in Atos Village.)



Through the business partnership, Kudan and Atos will jointly develop this handheld mapping device to go forward for its productization, and will also consider further and validate the use of SLAM technology in other ICT-based construction.

■ Future Outlook

We estimate that this partnership will only have a minor effect on the company's fiscal performance at this point in time. In the event that any issue arises that needs to be made public, swift notification will be carried out.

Atos Co., Ltd.

With the vision of leading the innovation of the construction industry and realizing a construction company that no one has ever seen before, Atos is a leading ICT construction company, and materializes unprecedented initiatives, such as the introduction of cutting-edge ICT technology, the establishment of innovative business models, and the construction and operation of Atos Village, a large-scale demonstration experiment and educational field. Atos not only offers highly accurate and quick constructions using ICT technology, which is its strength, but also develops and releases a series of small construction DX products based on needs and ideas from construction sites. For more information about Atos' business, its products and Atos Village, please visit the Atos website (<https://atos.co.jp>).

■ Company Details

Name: Atos Co., Ltd.

Head Office: 115-2 Kotoyori Kazo-city, Saitama Prefecture

Representative: CEO Naoya Watanabe

About Kudan Inc.

Kudan (Tokyo Stock Exchange securities code: 4425) 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 using its high-level technical innovation to explore business areas based on its own milestone models established for deep tech which provide wide-ranging impact on several major industrial fields.

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

■ Company Details

Name: Kudan Inc.

Securities Code: 4425

Representative: CEO Daiu Ko

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

