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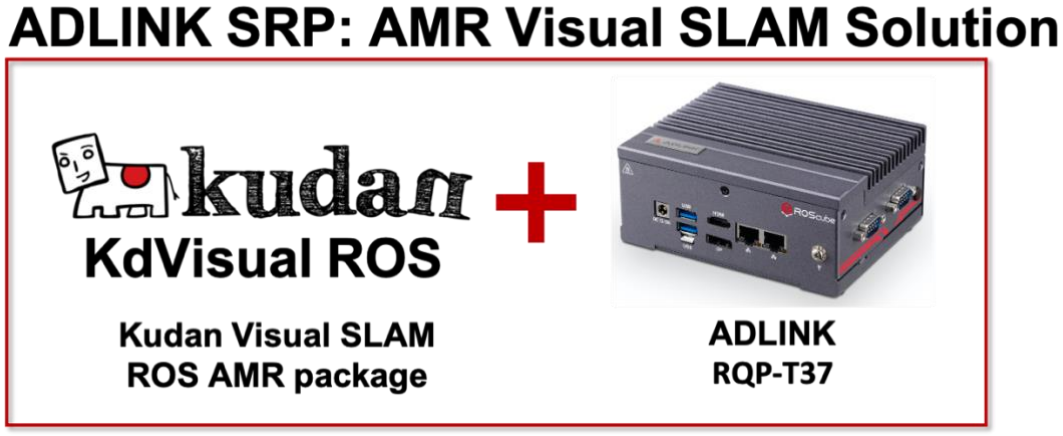
Kudan Inc.

Kudan and ADLINK launched AMR Visual SLAM Solution combining ROSCube and Kudan SLAM for robotics OEMs

Kudan Inc. (headquarters in Shibuya-ku, Tokyo; CEO Daiu Ko, hereafter "Kudan") is pleased to announce that Kudan and ADLINK Technologies Inc. (hereafter "ADLINK") launches AMR Visual SLAM Solution for autonomous mobile robots (AMRs) and auto guided vehicles (AGVs) to help OEMs accelerate developing AMRs more reliable and robust in broader applications. The initial version consists of ADLINK's RQP-T37 and Kudan Visual SLAM software optimized for Intel XPU on ROS2 platform. It is also planned to release the version which supports ROSCube-X that is based on NVIDIA Jetson platform.

The AMR Visual SLAM Solution is a "Solution Ready Platform (SRP)" using the well-validated ADLINK's RQP-T37 controller and Kudan Visual SLAM (KdVisual), which is compatible with ROS and ROS2. This ensures prompt integration of KdVisual into the customer's overall architecture with boosted performance, especially in challenging environments of AMR applications such as dynamic objects, scenery changes, and indoor/outdoor mixed applications. This is a perfect platform for the development of industrial use robotic applications such as autonomous mobile robots (AMR) and autonomous mobile industrial robots (AMIR).



The most distinctive benefit of this offering is the ease of integrating Visual SLAM into the AMR system and high-performing AMR navigation. ADLINK offers its Neuron SDK together with ROSCube, which contains various software modules required in AMR development and Kudan Visual SLAM package also offers several supporting software to enable seamless integration, especially for those who use 2D-Lidar SLAM for their localization approach.

3D Visual SLAM is quite different from 2D-Lidar SLAM in terms of mechanism and characteristics. Therefore, many companies cannot see its proper performance before they give up using it. Kudan has very extensive knowledge on how to deploy visual SLAM properly through numerous projects. This Solution Ready Platform includes not only Kudan's Visual SLAM software but also other supporting documents and modules to accelerate integration and prototyping. We have some examples of developing an initial prototype of AMRs with our visual SLAM package in 2 weeks.

Another challenge robotics OEMs face when they try to adapt visual SLAM is that it's quite challenging to have reliable performance by building from scratch or based on open-source software. The following points are some of Kudan Visual SLAM's distinctive advantages, which result in a productivity increase of robots, and application expansion.

- 5x - 10x faster process speed
- 25% - 50% memory usage
- Average <1cm repeatability/ repeatable accuracy
- Better absolute accuracy than 2D-Lidar SLAM
- Robust against 95% scenery changes

Please visit the special web page for this AMR Visual SLAM Solution on our website:
https://www.adlinktech.com/en/kudan-amr-visual-slam

About ADLINK Technology Inc.

ADLINK Technology Inc. (TAIEX:6166) leads edge computing, the catalyst for a world powered by artificial intelligence. ADLINK manufactures edge hardware and develops edge software for embedded, distributed, and intelligent computing – from powering medical PCs in the intensive care unit to building the world's first high-speed autonomous racecar – more than 1600 customers around the world trust ADLINK for mission-critical success. ADLINK holds top-tier edge partnerships with Intel, NVIDIA, AWS, and SAS, and also participates on the Intel Board of Advisors, ROS 2 Technical Steering Committee, and Autoware Foundation Board. ADLINK contributes to open source, robotics, autonomous, IoT, and 5G standards initiatives within 24+ consortiums. For over 25 years, with 1800+ ADLINKers and 200+ partners, ADLINK enables the technologies of today and tomorrow. Follow ADLINK Technology on LinkedIn, Twitter, Facebook or visit adlinktech.com.

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 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/.

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■For more details, please contact us from here.