Personnel following strategy with quadruped robot

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Abstract—To enhance the quadruped robot's human-computer interface and environmental adaptation, particularly its ability to follow humans, this paper aims to introduce the following strategy, based on the visual detection of AprilTags. OpenCV library is used to aid the implemented computer vision algorithms. Additionally, Robot Operating System (ROS) facilitates the communication between Bittle and the central computational platform. Eventually, Bittle should follow and aid the personnel at construction sites in terms heavy-duty tasks.

Index Terms—Quadruped Robot ,Computer Vision,leader tracking

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