



## **RESEARCH ON VISUAL NAVIGATION AND REMOTE MONITORING TECHNOLOGY OF AGRICULTURAL ROBOT**

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*Abstract- To solve the problems of instability of agricultural robot when avoiding obstacles, a kind of navigation method which combined monocular visual navigation technology and remote monitoring technology was proposed: using the centerline method to extract the navigation path to achieve visual navigation; the monitoring center received two-way real-time image signals of the agricultural robot, when the agricultural robot met the obstacle or other situations, the remote monitoring center would start the alarm, then the operators could send control signals through the monitoring software to implement manual intervention. The experiment showed that the system improved the reliability of the navigation.*

**Index terms:** agricultural robot, visual, navigation, remote monitoring, reliability.