Owaribito-CU

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1 Profile

The Owaribito robot soccer team has competed in RoboCup at Stockholm (1999) and Seattle (2001) as a joint team of Aichi Prefectural University and Chubu University. This year, two universities participate in RoboCup 2002 as individual teams. Owaribito-CU robot soccer team is from Chubu University.

2 This Year's Features

Pass a ball to a robot in an open space is an effective strategy in soccer games. In small size league, top teams showed sometimes passes between robots at 1999. From 2000, spectators recognize them clearly as passes play between robots. One of reasons that pass play has become common is that specific mechanical devices that makes ball handling such as dribble, pass and shoot, easier than ball control by bumping itself against a ball.

Our robot is the same as Owaribito, that has no special devices. Our team's purpose is to carry a ball by cooperating themselves steady and safely even without special devices. The features are

carrying a ball in formation The purpose of our robot control is to carry a ball by cooperation movements of three robots. Robots carry a ball with holding the ball in the center of them. The play looks like maul play in rugby not soccer.

target location by calibrated camera model Calibration of the internal and external parameters of the camera is used to calculate the location of the target in the warped image.

Viewer of planned motions and recorded motions It is necessary to monitor the difference between planned movements and the real movements. Logviewer records commands from a host computer, and the robots locations recognized from vision.

3 Conclusion

Maul play can be used as two ways to attack to the opponent goal and defend by holding the ball. We employ calibrated camera model to calculate targets' location and develop tools for estimating their movement.