

LEARNING ACTION OF SKILLED OPERATOR FOR AUTONOMOUS MOBILE ROBOT CONTROL

One of the main robotics tasks is efficient autonomous mobile robot movement in unknown in advance environment with obstacles. There exist different strategies to design control systems to perform the robot movement. In this article possibility to use skilled operator's knowledge for autonomous mobile robot control is presented. It is useful to teach robot with aid of skilled operator – human expert, because his ability to control robot is obvious. When we control the robot with a joystick, we gather data from sensors and record speeds of the wheels. Then we can use these data to train artificial neural network for robot control. After the training, the robot can repeat operator's actions and move safely in the environment.