

ABSTRACT

Theme: “The system of navigation, obstacles recognition and path finding in the maze for mobile robot. Navigation module of mobile robot in maze”.

Thesis explanatory note: 100 p., 36 fig., 7 tabl., 2 appendices, 11 sources.

The paper reviewed and analyzed some of the most common, currently existing, modern mobile robot navigation approaches. Reviewed modules for the spacial representation building for the mobile robots.

Created software product that allows the user to build a map of the surrounding environment work in conditions of fuzzy input.

The program is implemented in an integrated development environment PyCharm using the programming language Python. Mentioned the possible ways of further improvement of the system.

MOBILE ROBOT, INTELLIGENT ROBOTIC SYSTEM, NAVIGATION OF MOBILE ROBOT, FUZZY INPUT, INTERNET OF THINGS.