SUMMARY

The degree project includes a 104 pages 6 main parts, 36 figures, 10 tables, 33 of the source literature, 6 sheets of A1 size.

In this project, the general concepts of industrial robots were given. The material on the development of the design of four link SCARA robot is presented. The material devoted to the development of electric driven schemes is described. The main problems of kinematics, problems of the theoretical position are given, direct and inverse problems of kinematics are presented, the speed problem is solved, as well as the dynamics of the manipulator. The model of SCARA robot is promoted while working with the path planning.

The calculation and implementation of this diploma project are provided by the following programs: : *IntelliJ Idea, Eclipse Cpp, MATLAB R2016a, Microsoft Office Word 2010, Microsoft Office Visio 2010, MathType 6.9, Simulink SimMechanics KOMPAS-3D V16.*

SCARA, ROBOT, STEERING ENGINE, DRIVER, KINEMATIC PROBLEM, MICROCONTROLLER.