Abstract. Computer 3Dmodeling ofanyrobotic system has become widespread

 in the last few years and is used for educational and research purposes. Currently,

 there are lots of 3D modeling tools available for various fields of robotics research

 with some advantages and limitations. In this paper, as an example a computer

 model of the RRRRT manipulator and its movement. To create a 3D model of

 the manipulator, at first, you need to obtain 3D models of the manipulator com

ponents: kinematic pairs, links, grips, etc. in the Maple environment. Next, it is

 necessary to combine all the parts of the manipulator into one system using the

 developed program in the Maple environment, while specifying the main con

nections between them to create a full-fledged visualized moving model of the

 manipulator. Also, in this paper, the direct positional kinematics problem of this

 manipulator is studied in detail. To find the kinematic characteristics of the manip

ulator, the Denavit-Hartenberg and Newton-Euler methods were rationally used.

 The received results are presented in the form of 3D graphs. Such graphs allow

 you to visually observe how the modules and directions of the given parameters

 of the manipulator change in the graph, depending on the manipulator position in

 space.

 Keywords: computer modeling · kinematics · positional problem · 3D model ·

 manipulators · Maple