

Abstract

The presented paper contains 73 pages, 28 illustrations, 22 tables and 31 names of the used sources.

In the master's dissertation the review of literary sources on the subject of diagnostics of a person's view was conducted. Defects and visual impairments, as well as the possibility of their detection, are described. The main focus on the review was the violation of the perception of color by the human eye and the existence of systems by which such violations can be detected. On the basis of the review of literary sources, a functional scheme was developed and a selection of elements was made that allow automating the diagnostic process of the system. Synthesis of the system with the use of software, in coordination with elements of the functional scheme is executed. Also in the dissertation there is a section of the development of the startup project, which describes the possibility of the release of this system on the market and to compete with existing analogous systems.

Key words: color perception, defects of vision, modeling, optical system, automatization.