ABSTRACT

Master's thesis performed at 87 pages, contains 17 illustrations, 1 supplement.

The thesis is devoted to the actual topic – The system of pattern recognition on the road.

The aim – is to develop a system that will recognize road signs, road markings and other vehicles using deep neural networks.

The object of study – deep neural networks.

Purpose of the study – usage of deep neural networks in pattern recognition tasks.

Methods – analysis of deep neural networks, experimental choice of the architecture.

Scientific novelty – a program was developed, the task of which was to recognize road signs, road markings and other vehicles.

It is possible to improve the product by creating your own autopilot based on the developed program

IMAGE RECOGNITION, CONVERTING NEURAL NETWORK, ROAD SIGNS, ROAD MARKING, VEHICLES