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SECTION 3

DIGITIZATION OF INDUSTRY

004.896:621.865

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MANIPULATOR ROBOT CONTROL SYSTEM USING EYE MOTION

The design of the developed model of the rehabilitation system for paralyzed disabled people based on a robotic arm and software for controlling the data by the robot using an eye tracker is described.

Keywords: robot, manipulator, control, eye-tracker.

My Spoon () [1]

[2],

[3].

() [4].

« »

Tracker 4C (. 1).

Arduino.

. 2.



1 - Tobii Eye Tracker 4C



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. 3.

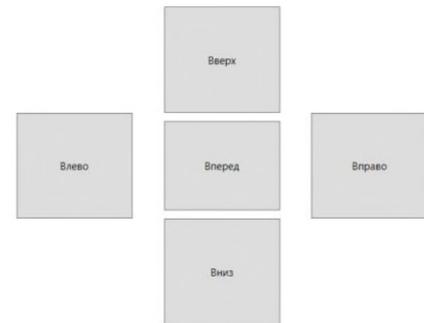
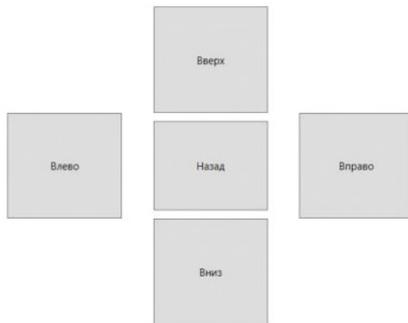
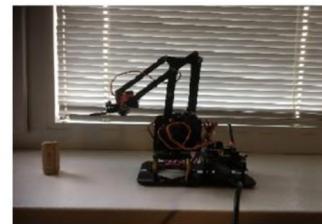
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MainWindow
Калибровка Настройки Помощь



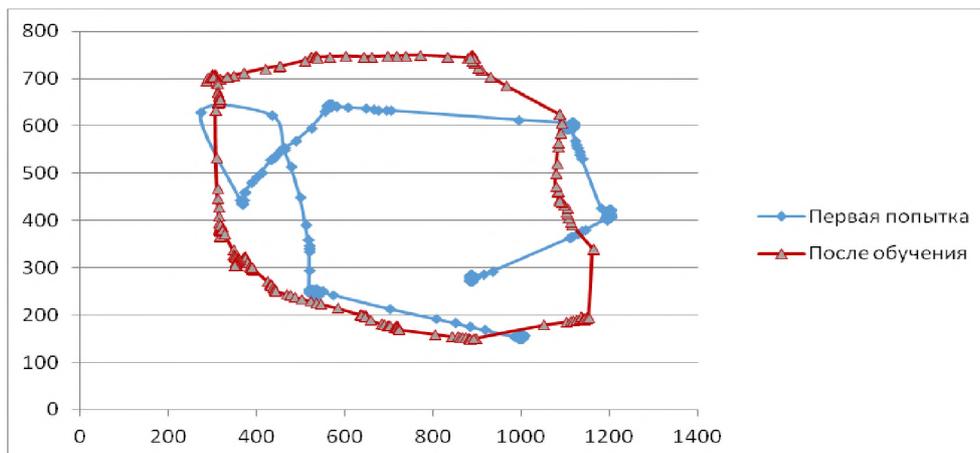
Отпустить

Захват



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20-08-01178.

1. Secom T.L. Meal-assistance robot, my spoon [Electronic resource] // Mode of access: <https://www.secom.co.jp/english/myspoon/>.

2.

3. Hochberg L.R., Donoghue J.P. Sensors for braincomputer interfaces // IEEE Eng Med Biol Mag. - 2006. - vol. 25(5). - P. 32-38.

4. Sharma V.K., Saluja K.S., Mollyn V., Biswas P. Eye Gaze Controlled Robotic Arm for Persons with Severe Speech and Motor Impairment // ETRA '20: 2020 Symposium on Eye Tracking Research and Applications. - 2020. - vol. 12. - P. 1-9.

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