

# 10th International Conference "Distributed Computing and Grid Technologies in Science and Education" (GRID'2023)



Contribution ID: 285

Type: not specified

## Development of the system for recognition sensors indications of engineering equipment in the computing center at NRC «Kurchatov Institute» - IHEP”

*Monday 3 July 2023 17:30 (15 minutes)*

Modern computing centers consist of many engineering systems which provide working conditions for complex computing hardware. Some of such systems do not have build-in monitoring components or their cost is very expensive which makes them difficult for surveillance. Meanwhile there are many open source software libraries available for computer vision and image recognition. One of them is OpenCV - Open Source Computer Vision Library which was developed since 2006 and has many computer vision algorithms implemented with supporting hardware acceleration of recent GPU and CPU.

This work describes the development of the system for recognition different sensors indications of engineering equipment: cooling system status, water pressure, water meter. It is written on Python with OpenCV and tested in the computing center at NRC «Kurchatov Institute» - IHEP”.

### Summary

**Primary author:** SHEMEIKO, Maria (Institute for High Energy Physics named by A.A. Logunov of National Research Center “Kurchatov Institute”)

**Co-author:** KOTLIAR, Viktor (Institute for High Energy Physics named by A.A. Logunov of National Research Center “Kurchatov Institute”)

**Presenter:** SHEMEIKO, Maria (Institute for High Energy Physics named by A.A. Logunov of National Research Center “Kurchatov Institute”)

**Session Classification:** Distributed Computing Systems

**Track Classification:** Distributed Computing Systems