

Summary

I Exhibition-Forum of the IT-Academgrad “Artificial Intelligence in Belarus”

At the first exhibition-forum of the IT-Academgrad “Artificial Intelligence in Belarus” that was held on October 13-14, 2022 in the Presidium of the National Academy of Sciences of Belarus, Belarusian State University of Informatics and Radioelectronics introduced developments in four thematic areas:

- Intellectual Systems;
- Education;
- Medicine and Health;
- Safety and Ecology.

The biggest interest enjoyed the following developments of the university:

- projects that are being implemented with foreign partners in the field of expert system development for the electromagnetic compatibility of complex airborne and ground facilities of radio systems. The software and hardware complexes that are being developed are based on original algorithms for the analysis of non-linear noises. The algorithms are unique in terms of modeling speed and precision;

- laboratory models of a neural network based on PLD and embedded systems based on STM32 and ESP32 microcontrollers, as well as a prototype system for controlling a robotic manipulator “Roboruka-P1”;

- system for supporting decision making by evaluating technical condition of complex mechanisms and aggregates that is used to evaluate technical conditions of rotor mechanisms by vibration parameters and setting of automatics for protective shutdown of turbine units by individual vibration parameters of bearing supports. The development was implemented in Minsk Thermal Power Plant and Lukoml State District Power Plant.

In the course of the exhibition a number of interviews to the TV channels such as “ONT”, “MIR”, “RTR Belarus”, and “STV” were conducted. As a result of the exhibition, BSUIR was awarded a diploma.

