Оригинал-макет тезисов доклада

1. Индекс УДК: 004.415.2.031.43 - Проектирование систем реального времени.
2. Название тезиса доклада: The development of server architecture of monitoring systems that use UAV.
3. Автор: Прокофьев К. В., НИУ ИТМО, г. Санкт-Петербург.
4. Научный руководитель: Сазанович Ю. А., НИУ ИТМО, г. Санкт-Петербург.
5. These days life is being intensively digitalized in Russia. Automated and automatic systems are being developed and integrated. Ecology, sanitary and secure monitoring systems using UAV and intelligent systems are being developed. These systems need to ensure processing, storing and analyzing data, integration into objects (reserves, closed areas, forests, etc.) and emergency services (security, fire service, MoE, etc.), flexible operational management with limited resources.

   The purpose of the paper is to organize system features considering scalability, realtime bigdata, operational management and connection with external services and departments.

   To improve system operation server structure consists of cloud services. The UAV management is supposed to be orginized through tunnels. Data processing has several steps to analyze accuracy, errors, and speed optimization.

   Services architecture and its moduling are considered as intermediate results. Internal and external communication protocols are constructed.

   The work results in designing server architecture of monitoring systems that use UAV. Server part was built and the prototype system was successfully tested. System optimization and customization is planned with market entry in the near future.

Автор: Прокофьев К. В. _____
Научный руководитель: Сазанович Ю. А. _____