

## ABSTRACT

Diploma work: 117 p., 9 fig., 6 tabl., 2 appendixes, 16 sources.

**BIG DATA, MICROSERVICE ARCHITECTURE, LIBRARY DEVELOPMENT, SCALA, APACHE SPARK.**

The object of study – the problem of big data processing.

Subject of research – simplification and acceleration of the development of simple microservices for the big data processing.

Purpose – develop a library for the development of microservices for the big data processing.

Methods of research – methods of big data processing.

Actuality – development of a library for the development of simple microservices for the big data processing to popularize the big data processing.

An analysis of the obtained results was carried out, the analysis of the developed system was performed.

The further development of the research subject – development of a complete framework for the creation of microservice-oriented applications for the processing of large data.