

Academic year	Semester	Description of the conducted research
2019/2020	1	Developing a common mathematical model of a computational graph for various technologies and standardizing it. Working on possible vectorized representations of a computational graph representing business processes that can be used in machine learning or optimization algorithms.
2019/2020	2	Investigation of the complexity class of the isomorphism problem for the above presented class of graphs. Development of an effective method for comparing two different procedures using optimization methods and graph neural networks
2020/2021	1	Development of similarity metrics for computational graphs and a method for finding similar graphs.
2020/2021	2	Examine the naming ontology in the database. Building a statistical model of the language of table and column names in a given data warehouse. The use of this model in methods finding similar computational graphs and comparing two graphs.
2021/2022	1	Developing a method that reduces the code by finding the same transforms (so-called mapplets) used in various procedures, with the help of graph embedding and optimization methods.
2021/022	2	Development of a method of finding suggested errors by means of anomaly search and a method that suggests a proposed solution.
2022/2023	1	Developing a method for finding errors using data during processing.
2022/2023	2	Preparation of the doctoral dissertation.