

STANDPOINT

on the Thesis for obtaining the educational and scientific degree PhD,
the Professional Area 5.3. Communication and computer technology
the Scientific PhD Program "Computer Systems and Technologies"

PhD Thesis Title: **Generalized network models of the Data Mining process for managing
and protecting a smart home**

Author of the PhD Thesis: **Tihomir Videv Videv**

Scientific supervisors:

Acad. Prof. Krassimir Todorov Atanasov, DSc, DSc

Prof. Sotir Nikolov Sotirov, PhD

This standpoint was prepared in accordance with Order UD No. 64/21.02.2024, by the Rector
of the University "Prof. Dr. Asen Zlatarov" - Burgas

As a member of the Scientific Jury I have received:

- Order UD No. 64/21.02.2024, by the Rector of the University "Prof. Dr. Asen Zlatarov"
– Burgas;
- Creative CV of the PhD student;
- PhD Thesis for awarding the educational and scientific degree PhD;
- Abstract of PhD Thesis;
- Copies of the publications;
- Additional documents.

1. Relevance of the problem developed in the dissertation work

The PhD Thesis on the topic: Generalized network models of the Data Mining process for managing and protecting a smart home, presented by Tihomir Videv Videv examines an important and current topic. In order to form the tasks and the goal, a comprehensive literature review was made, which included 112 literary sources - mostly in English. The literature review is focused on the problems and challenges in the development of generalized network models of Data Mining processes. The abstract is 51 pages long and clearly, accurately and sufficiently reflects the essence of the dissertation work.

Based on the materials presented to me, it can be summarized that the topic is current and with appropriate tools, the tasks set in the dissertation work have been solved and concrete results have been reached, which have a scientific - applied and applied nature. The essence of the achieved results is visible and justified. In the achieved results, the author has a personal contribution and they can be defined as novelty in the considered issue and are an extension of the existing knowledge. The analyzes and approaches made, the research conducted and the results obtained are presented in 8 scientific publications. Six of the publications are indexed in world-renowned databases.

2. Evaluation of the scientific results and contributions of the dissertation work

Contributions have the significance of novelty in the considered issue and are an extension of existing knowledge. The network models made are original. They show the author's understanding and his attitude to the scientific problem. I accept the claims made by the PhD – student for scientific and applied contributions. They are a logical result of the scientific and applied research presented in the dissertation.

3. Critical notes on the presented work

The presented materials are formed in the necessary volume and quality and are accompanied by a number of proofs. Significant deficiencies in the presented materials or in relation to the testing of the obtained results have not been found. I will make some critical remarks about the candidate and the materials presented by him:

- There are some gaps in the layout of the dissertation work;
- In some places, stylistic errors in wording are noticeable. A high degree of precision is required;
- In the bibliographic reference to adhere to the defined standards.

I will allow myself to give one constructive recommendation - to focus his efforts on publishing activities in reputable and refereed journals.

4. Justified and clearly formulated conclusions

The PhD student has completed a full-fledged training in the study program and clearly shows capabilities to conduct independent scientific studies and work. The presented summary of the dissertation has the quality of a completed scientific and applied study on a present problem with scientific and applied contributions and published results. The presented materials meet the requirements of the Law for Development of the Academic Staff, the Rules for its implementation and the Procedures and rules of the University "Prof. Dr. Asen Zlatarov" - Burgas, which gives me the reason to make the conclusion that the topic of the PhD thesis is relevant, and that an in-depth scientific study was conducted, scientific and applied results of

importance for theory and practice were obtained, thus my overall assessment of the dissertation of the PhD student is positive. In conclusion, I propose to the scientific jury to recognize the relevance, the contributions and the results of the presented PhD Thesis and to award Tihomir Videv Videv with the Educational and Scientific degree Doctor of Philosophy (PhD) in the field of higher education - 5. Technical sciences, professional subject area - 5.3. Communication and computer technology, PhD Program "Computer systems and technologies".

Burgas, 12.05.2024

Signature: _____

Подпис заличен
Чл.2 от ЗЗЛД

/Prof. Stanislav Simeonov, PhD/