

## OPINION

by **Prof. Dr. Plamena Ventseslavova Zlateva**

*Professor in professional field 4.6. Informatics and Computer Sciences,  
scientific specialty Informatics*

Department of Informatics, University of National and World Economy

of a dissertation for the acquisition of the educational and scientific degree "**Doctor**"  
in professional field 4.6 *Informatics and Computer Sciences*,  
doctoral program "*Informatics*",

with author **Gergana Dimitrova Vassileva**

on the title "*Models and Methods for Providing Personalised Services  
in E-learning*"

### 1. General information about the procedure and submitted documents

By Order №: 100/04.05.2026 of the Director of IICT-BAS on the basis of Art. 4, para. 2 of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB) and by a decision of the Scientific Council of IICT (Protocol №: 4/29.04.2026) in connection with the procedure for acquiring the educational and scientific degree (ESD) "**Doctor**" in professional field 4.6 "Informatics and Computer Sciences", doctoral program "Informatics", by **Gergana Dimitrova Vassileva** with a dissertation on the title "*Models and Methods for Providing Personalised Services in E-learning*" I am appointed as a member of the Scientific Jury.

By Decision of the First Meeting of the Scientific Jury, I am selected to prepare an Opinion on the submitted dissertation.

**Gergana Vassileva** was finished from full-time doctoral studies with the right to defend his thesis, effective from 01.01.2022 by Order №: 319/30.12.2021 of the Director of IICT-BAS on the basis of Art. 24, para. 4 of the Regulations for the Implementation of the Act on the Development of the Academic Staff in the Republic of Bulgaria (RIADASRB) and by decision of the Scientific Council of IICT (Protocol №: 13/22.12.2021).

The doctoral student's scientific supervisor is **Prof. Dr. Vladimir Monov**

The opinion was prepared in accordance with the requirements of Art. 6 (3) of the ADASRB, Art. 27 (1) and (2) of the RIADASRB and the Regulations for the Specific Conditions at IICT-BAS for the Implementation of the ADASRB and RIADASRB.

The doctoral student Gergana Vassileva has submitted the following materials: Dissertation, Abstract of the dissertation in Bulgarian and English; Copies of the publications (8 copies) on the dissertation; Declaration of originality of the results; References for fulfilling the minimum national requirements and the requirements of

IICT-BAS for acquiring the ESD "Doctor" in professional field 4.6 "Informatics and Computer Sciences"; Report on similarity from the verification of the dissertation with a licensed system (StrikaPlagiarism) and other documents.

## **2. General characteristics of the submitted dissertation**

The dissertation of Gergana Vassileva is developed in a volume of 174 pages and includes a glossary of terms, introduction, four chapters, conclusion (summary of the results obtained), contributions (scientific-applied), directions for future research, author's publications on the dissertation, list of noted citations of publications, declaration of originality of the results, bibliography. The literature used contains 130 sources in English.

The dissertation is a scientific study that examines current issues for the modern information society, related to the need for a transition from standardized to more flexible and adaptive learning models that take into account the individual abilities, needs and experience of learners.

The aim of the dissertation is to propose a model, methods and software tools for training needs analysis, creation of an individual competency profile and implementation of personalized training programs. To achieve the set goal, five tasks have been formulated professionally and with understanding. The methodology and tools of the study are appropriately selected and used correctly.

## **3. Evaluation of the contributions to the dissertation**

In the dissertation, based on thorough research and the results obtained, five scientific-applied contributions have been formulated, which I believe are significant and useful for the provision of personalized services in modern e-learning.

Models have been developed for personalizing the training program according to the individual competency profile of the learner, creating an individual competency profile and personalized training programs, using generative artificial intelligence in creating educational content, building a complex software environment for managing personalized training, and defining the requirements for the functional capabilities of individual modules. An architecture and prototype of a web-based platform for creating personalized training programs have been developed.

The contributions correspond to the set goal and tasks.

I highly appreciate the degree of personal participation of doctoral student Gergana Vasileva in achieving the five contributions.

#### 4. Evaluation of the dissertation publications and the fulfillment of the requirements for the acquisition of the degree "Doctor" under PF 4.6

On the topic of the dissertation, Gergana Vasileva has provided 8 publications, which reflect the obtained research results and contributions.

The doctoral student is the sole author of two of the publications. In the remaining six publications, the doctoral student is co-authored with the supervisor and another scientist, being the first author in three and the second author in three.

Four publications are in editions that are referenced and indexed in world-famous scientific information database (*Web of Science* and *Scopus*). One of the publications is in a journal with a quartile of Q2 and SJR in *Scopus*.

The presented list of 29 citations to three of the publications on the dissertation makes an extremely good impression.

The eight publications and 29 citations show a very good dissemination of the obtained results among interested specialists on the problems and solutions in the dissertation.

The submitted publications of doctoral student Gergana Vasileva ensure the fulfillment of the minimum national requirements of 30 points under "Group of Indicators G" (Indicator G 7) for the ESD "Doctor" in PN 4.6. "Informatics and Computer Sciences" and the corresponding minimum requirements of IICT - BAS.

#### 5. Evaluation of the dissertation abstract

The abstract meets the requirements by fully reflecting the content of the dissertation, the results obtained and contributions.

#### 6. Critical remarks and recommendations

Essentially, I have no critical remarks or specific recommendations.

#### 7. Conclusion

In conclusion, I declare that the presented dissertation with title "*Models and Methods for Providing Personalised Services in E-learning*" **satisfies the requirements** for the acquisition of the educational and scientific degree "**Doctor**" of the ADASRB, RIADASRB and the Regulations for the specific conditions at IICT-BAS for the implementation of the ADASRB and RIADASRB.

I give **positive conclusion** and strongly recommend that the Honorable Scientific Jury vote for the award of the educational and scientific degree "**Doctor**" to **Gergana Dimitrova Vassileva** in the professional field 4.6 "Informatics and Computer Science", doctoral program "Informatics".

03.06.2026  
Sofia

Member of the Scientific

