



OPINION

from Assoc. Prof. Dr. Vladimir Ivanov, Institute of Information and Communication Technologies - BAS

(scientific position, academic degree, name, surname, educational / scientific institution)

for obtaining the educational and scientific degree "Doctor" (PhD)" in professional field 3.5. Social Communications and Information Sciences.

with a dissertation on the topic: "Artificial intelligence methods for gathering, synthesizing, processing and delivering information in journalism",

presented by Ventsislav Ventsislavov Vassilev, full-time student in the Department Press Journalism and book Publishing of the Faculty of Journalism and Mass Communication

with supervisor: Prof. Dr. Efrem Efremov

presented by Ventsislav Ventsislavov Vassilev

I. Evaluation of the qualities of the text of dissertation

The scope and structure of the thesis are classical and meet the scientific requirements for a dissertation. The thesis contains an introduction, three chapters and a conclusion, the scientific contributions and a list of the author's publications among which there are indexed in world databases, as well as contributions to international conferences.

The abstract is adequate to the thesis, reflects its main summaries and meets the requirements. The research objectives are well formulated. The scientific problem is well stated. The parts are logically and meaningfully connected. An interdisciplinary approach is used. The set tasks are fulfilled and the obtained results are comprehensively described and analysed.

The PhD student has demonstrated a high level of critical thinking, good ability to analyze scientific publications, summarize and narrate them in an engaging way.



II. Contributions of the dissertation research

1. Complete classification of AI tools - recognition of types of AI (from "narrow" to "general", from reactive machines to self-aware), sub-fields (machine learning, NLP, computer vision) and levels of programming (machine code to visual programming).
2. Impact analysis on journalism - empirical data on the reduction of time needed for news production and costs with automated generation, comparative experiments (live decoding) and identification of risks to the quality (and credibility) of the final product.
3. An empirical study in the Bulgarian media environment - assessing the degree of integration, technical and resource constraints, proposing models for off-the-shelf solutions that can be implemented immediately. It is noteworthy that mainly free models are mentioned, which would not require financial costs, but only better computer literacy among the employees.
4. Conceptual model for a Bulgarian digital assistant - detailed descriptions of stages, algorithms for extraction, prioritization and automatic title, integration into editorial ERP/CMS platforms.
5. Defining the blind spots - systematization of ethical and social risks: information bubbles, algorithmic bias, potential for audience misinformation and reputational damage to media in case of misuse of AI.
6. Practical orientation - specific recommendations for journalists and managers on balanced implementation of AI and monitoring the effects of automation

III. Notes and recommendations

Ethical and legal aspects -The topic of ethics and regulation of AI may be the subject of further research, both because of European regulations and the future emergence of such regulations worldwide. This would be beneficial for the development of next generation AI solutions in journalism with universal applicability, such as to combat fake news and algorithmic bias.

Developing practical guides for implementing AI in journalism practice, targeting existing media organizations in Bulgaria and other countries with similar problems (digital backwardness and lack of finance to develop expensive custom solutions).



Developing newsletters with AI innovations applicable to the media sphere, for the needs of scientific organizations that teach journalism, and for media that want to know what they can apply without the need for their managers to be familiar with AI.

-Learn MATLAB

III. Publications and participation in scientific forums

In the appendices, the list of the author's publications is indexed in world databases, as well as participation in international conferences. Which gives me reason to believe that the requirements of the Regulations on the conventions and the procedure for acquiring scientific degrees and holding academic degrees at Sofia University "St. Kmentli Ohridski" for testing and disclosing the results of the study according to minimum national requirements .

V. Conclusion

The author has conducted a thorough study of the problem and has proposed a solution in a new and promising area. All requirements of the Law on the State of the Republic of Bulgaria and the regulations for its application have been met, as well as in terms of the scope, volume and quality of the dissertation work. On these grounds, I propose to the esteemed jury to award Ventsislav Ventsislavov Vassilev the educational and scientific degree of "doctor".

Jury member:

Date: