

AI ANDS ITS APPLICATION TO PERSONALIZATION OF PROGRAMMING LEARNING IN STEAME INTEREST CLUBS

Todorka Glushkova

Abstract. *Artificial Intelligence (AI) can play a key role in personalized programming learning in STEAME (Science, Technology, Engineering, Arts, Mathematics, and Entrepreneurship) interest clubs at school by providing innovative methods and tools that facilitate learning and inspire students. The article will mainly focus on the personalization of learning in aspects such as:*

- *Providing opportunities for personalized learning by analyzing students' personal characteristics and providing individually adapted learning and development according to their own pace and style.*
- *Providing AI learning assistants to communicate with students, provide additional explanations, and support them during exercises or working on projects.*
- *AI can be used to evaluate and improve programming code. Programmable simulations and visualizations can also be created to help students understand complex concepts and see the results of their programming code in real-time.*

In addition, AI can analyze data about an individual student's past academic performance and interests and predict what fields or projects would be the best fit for them.

Using AI in STEAME interest clubs can enrich the educational process and inspire students to get excited about the world of programming and science. It is important to emphasize, however, that AI must be used in accordance with ethical standards and pay attention to the protection of personal data and the age-appropriateness of learners.

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Todorka Glushkova, Paisii Hilendarski University of Plovdiv,
Faculty of Mathematics and Informatics, 236 Bulgaria Blvd., 4003 Plovdiv,
Bulgaria, email: glushkova@uni-plovdiv.bg