USE OF DIGITAL TOOLS FOR ALGORITHM VISUALIZATION IN PROGRAMMING EDUCATION

Elena Todorova, Stefka Aneva

Abstract. This article proposes pedagogical approaches for using and integrating visualization as a means of illustrating the programming learning process in schools. Various digital tools and platforms are presented that enable the dynamic illustration of algorithms. The importance of visualization as a means of increasing motivation and effectiveness in programming education is emphasized.

Key words: Digital Tools, Dynamic Visualization, Interactivity, Programming, Teaching Methodology.

Acknowledgments

This work was funded by project FP25-FMI-010, "Innovative interdisciplinary research in Informatics, Mathematics, and Pedagogy of Education", of the Scientific Fund of the Paisii Hilendarski University of Plovdiv, Bulgaria.

Elena Todorova¹, Stefka Aneva¹

¹ Paisii Hilendarski University of Plovdiv,
Faculty of Mathematics and Informatics,
236 Bulgaria Blvd., 4003 Plovdiv, Bulgaria
Corresponding author: etodorova@uni-plovdiv.bg