30. Valentyna Pikalova

Teaching and Learning Math Behind Computer Science with the Help of GeoGebra and Python

The paper is focused on topics where mathematics and computing are most relevant to each other, emphasizing the bridges between theory and practice. Topics include sets, relations, elementary graph theory, asymptotic notation and growth of functions, permutations and combinations, discrete probability. The main tools in order to support and compare problem-solving technique are GeoGebra and Python.

The main goal is not only to combine an appreciation of mathematical reasoning with an understanding of computing but enrich both of them through interdisciplinary approach.