

The Impact of Python Usage in the Teaching of Physics

The teaching of natural sciences in general, and physics in particular, has been transformed over the past decades under the influence of technology. The flexible working environments provided by programming languages have a considerable influence on the comprehension of Physics. This paper aims to demonstrate, through concrete results, the impact of using Python on improving the teaching-learning process of Physics for first-year students in Computer Engineering and Information Technology, whose curriculum includes Physics as part of their foundational education. The modeling and simulation of physical phenomena during exercise and laboratory sessions, using readily available and accessible GitHub repositories, contributed significantly to deepening conceptual understanding, increasing classroom participation and interaction, as well as enhancing students' analytical and technological skills-making Physics more accessible and relevant to their academic profiles.

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