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TEACHING COMPUTER SCIENCE
WITH GEOMETRIC MODELING
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ABSTRACT

Computer Science is becoming a mandatory subject in many high schools and universities. In order to convince students of the actual usefulness of the subject, it is important to teach it in the context of their main interests. In this paper we describe a Computer Science course tailored for students of Architecture. The course was designed to address several architectural needs that were previously identified as good examples for the application of Computer Science and it places a strong emphasis in the use of geometric concepts, particularly, three-dimensional geometric modeling. During the course, students solve a set of architectonic problems using algorithms, which they implement in Racket, a pedagogic programming language. This approach allows students to learn and explore Computer Science as an important tool for architecture and design.

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