

Curriculum Development Using Lego Robots

Over the past few years, WISC (the Women in the School of Computing) has been offering courses using Lego robots to students from grades 5 to 10. The Lego robots are an excellent way to introduce students to the concepts of programming, logic and problem solving. In this project, the student will develop a curriculum for courses ranging from 2 to 5 days that use the Lego Mindstorms NXT kits to teach elementary programming concepts. This will involve the development of programs for the robots that illustrate the concepts, the development of more complex programs which can be later modified by the students, as well as compiling fun activities that could be used by instructors in the classes.

This project requires a student who is creative and innovative and would be ideally suited to someone with teaching experience, or who has an interest in teaching children. The deliverable of the project will involve not only code, but also a comprehensive curriculum guide that can be distributed to course instructors.