

<b>Workshop:</b>	<b>Virtual 3D Worlds with Alice</b>
<b>Tutors:</b>	<b>Roger McDermott</b>
<b>Pre-requisites:</b>	<b>General familiarity with PCs</b>
<b>Necessary equipment:</b>	<b>Alice software installed on a computer (Note software is free and can be downloaded from <a href="http://www.alice.org">www.alice.org</a> )</b>
<b>Class Size:</b>	<b>~ 20 – 30 students. Can be done in pairs if necessary.</b>
<b>Duration:</b>	<b>~ 2hours</b>

This workshop aims to introduce students to the basic ideas of programming by getting them to control objects in a virtual 3D world.

Students often view computer programming as a difficult subject. Now with Alice, they can build a virtual 3D world which can be filled with a whole range of different objects from aliens to aircraft, dragons to dinosaurs, knights to ninjas. These can then be programmed to follow instructions from the student and the results are then run in a 3D graphical environment which shows the programs as animations.

The workshop will start by showing how the objects can be controlled with the mouse before using simple programming statements to animate them. Instead of making the student type lines of code into the computer, Alice uses the mouse to select program building blocks and drop them into place. This prevents students from making syntax errors. The animation itself provides the student with immediate feedback and it is easy to see the impact of a programming statement. It also demonstrates that programming can be a highly creative and imaginative exercise.

A full tutorial which leads the student through the workshop is supplied.

Example of an Alice scenario:  
Can the brave knight defeat  
the evil wizard and rescue the  
princess?

