



Lecture: 3D Computer Rendering

Organised by the
IET - ICT Section

Venue
**University of Sunderland
Sir Tom Cowie
St. Peter's Campus
Sunderland**

Time
**Monday 9 February
6.15pm**

Refreshments from 5.30pm on Level 2 Gallery, David Goldman Building
Meeting in David Goldman 109

Mr Kevin Ginty, University of Sunderland

Computer graphics is now often used by designers to inspect new products or by architects to visualise new developments.

This talk will describe how a powerful PC workstation and computer graphics software may be used to produce a 3D animation. The resulting output may be in the form of a cartoon or a visually realistic scene.

In the talk particular attention will be given to the rendering process. To produce the final output it is necessary to add colour to a sequence of wire frames. As the rendering process can often take a very long time to complete using a single processor it is common practice to deploy a parallel computer to reduce the rendering time.

The University of Sunderland Cluster Computer USCC which has 160 CPU cores will be used to demonstrate the rendering process. In addition, the design and architecture of the cluster computer will be described.

The performance of four different media development software packages for computer graphics will be described and compared.



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