CS MQP Interests 2007-2008

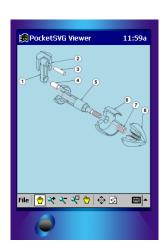
by Emmanuel Agu

Outline of Talk

- Two topics:
 - Perceptual issues in games
 - Energy efficient game engine on mobile devices







MQP 1:Perceptual Issues

- Question: how do various graphics/visual effects affect playability/outcome of games
- Answer through experiments:
 - Study architecture of available game engine (e.g. C4)
 - Change lighting
 - Add fog
 - Add smoke
 - Vary resolution
 - Substitute textures with images
 - Many variables!! Which one affect players most?

MQP 2: Power consumption

- Game engines optimized for speed, image quality
- Battery energy is main mobile problem on
- MQP focus: reduce energy usage of game engine
 - Understand energy usage of game engine's parts
 - Strategies to reduce the game engine's energy consumption

Contact/More info

- Emmanuel Agu, FL-139, emmanuel@cs.wpi.edu
- MQP interests page: <u>http://www.cs.wpi.edu/~emmanuel/research</u> <u>/projects/MQPs.html</u>