

Gaze Direction in 3D Virtual Scenes

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Many modern videogames present photo-realistic guided experiences for players. Designers face an increasing challenge in coming up with new ways to direct players through carefully crafted level designs, lighting, etc. . This dissertation proposes an image-based form of gaze direction designed to guide users through photo-realistic, highly-detailed 3D environments in a subtle, sub-conscious manner. Evaluation of this subtle visual guidance method is performed via saliency mappings and live user experiments. Implementation of the portable, user-friendly Eyetribe eye-tracker in the application explores the potential of the proposed 3D subtle guidance method with regards to commercially viable eye tracker solutions.