

The Engineering Reality of Virtual Reality 2008

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Editors

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Introduction

The Engineering Reality of Virtual Reality 2008 conference included fifteen speakers in four sessions. The goal of this year's conference was to provide a range of topics that investigated the applications of VR apparatus as well as the subjective perceptions and experiences with immersive VR experiences. The varied presentations included discussions in medicine, art, design, and strategies for configuring VR systems.

The conference started out with several papers exploring medical applications. These included papers discussing training for laproscopic procedures; treating panic disorder; teaching the anatomy of the breast to medical students; and exploring the performance of alternative tracking approaches. The panic disorder paper from Japan was particularly interesting and included a very detailed animated model of what it is like to ride the subway in Tokyo.

The conference then focused on the more artistic and experiential with a group of papers addressing both the artistic aspects of VR and the role of personal perceptions of self within virtual worlds. The papers addressed various issues including the progression of stereo cameras; the real time creation of an immersive VR art experience in a dome; and the conception of the self within various VR experiences.

The afternoon session presented works with a more industrial flavor. The first group of papers looked at ways to overlay VR type data onto running CNC machines; alternative ways to visualize and illustrate planetary motion within a planetarium; and approaches for delivering telepresence for the repair of complex equipment.

The second portion of the afternoon papers presented a variety of integrations of VR systems into a number of applications. These papers looked at issues such as the practicalities of shooting with stereo cameras on a movie set and tools to make that easier; interactions with body worn projector and camera systems; integrating virtual sets at local TV stations; the accurate calibration of cameras for virtual sets; and designing configurable projection VR systems for medical training.

This year's conference had some interesting papers and there were several that illustrated the level of precision required when trying to integrate the real and the synthetic. It was also interesting to start to hear how artists perceive these sorts of tools and how artists see the idea of VR evolving.

Thanks to all the authors who presented their work and all who attended the sessions.

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