

# *The Engineering Reality of Virtual Reality 2008*

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*Editors*

**31 January 2008**  
**San Jose, California, USA**

*Sponsored and Published by*  
IS&T—The Society for Imaging Science and Technology  
SPIE

**Volume 6804**

The papers included in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. The papers published in these proceedings reflect the work and thoughts of the authors and are published herein as submitted. The publishers are not responsible for the validity of the information or for any outcomes resulting from reliance thereon.

Please use the following format to cite material from this book:

Author(s), "Title of Paper," in *The Engineering Reality of Virtual Reality 2008*, edited by Ian E. McDowall, Margaret Dolinsky, Proceedings of SPIE-IS&T Electronic Imaging, SPIE Vol. 6804, Article CID Number (2008).

ISSN 0277-786X

ISBN 9780819469762

Copublished by

**SPIE**

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Printed in the United States of America.

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**Paper Numbering:** Proceedings of SPIE follow an e-First publication model, with papers published first online and then in print and on CD-ROM. Papers are published as they are submitted and meet publication criteria. A unique, consistent, permanent citation identifier (CID) number is assigned to each article at the time of the first publication. Utilization of CIDs allows articles to be fully citable as soon they are published online, and connects the same identifier to all online, print, and electronic versions of the publication. SPIE uses a six-digit CID article numbering system in which:

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**Margaret Dolinsky**, Indiana University (USA)

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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.

**Ian E. McDowall**  
**Margaret Dolinsky**

