

Institution of Engineering and Technology

# 5th IET European Conference on Visual Media Production

CVMP 2008

IET Conference Publications 547

November 26-27, 2008  
London, United Kingdom

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571  
[www.proceedings.com](http://www.proceedings.com)

ISBN: 978-1-60560-975-1

Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2008) by the Institution of Engineering and Technology  
All rights reserved.

For permission requests, please contact the Institution of Engineering and Technology  
at the address below.

Institution of Engineering and Technology  
P.O. Box 96  
Stevenage, Hertfordshire  
U.K. SG1 2SD

Phone: 01-441-438-767-328-328  
Fax: 01-441-438-767-328-375

[www.theiet.org](http://www.theiet.org)

# TABLE OF CONTENTS

<b>Environment Matting Into Photographs Using Coloured Rtcams</b> .....	1
<i>C. Li, P. Hall, P. Willis</i>	
<b>Example-based Reflectance Estimation for Capturing Relightable Models of People</b> .....	9
<i>P. Stroia-Williams, A. Hilton, O. Grau</i>	
<b>Video Matting Using Motion Extended GrabCut</b> .....	19
<i>D. Corrigan, S. Robinson, A. Kokaram</i>	
<b>Informational Retrieval Assisted Object Segmentation in Video</b> .....	28
<i>D. Ring, A. Kokaram</i>	
<b>Effects of Camera Aperture Correction on Keying of Broadcast Video</b> .....	38
<i>O. Grau, J. Easterbrook</i>	
<b>Merging of Feature Tracks for Camera Motion Estimation from Video</b> .....	43
<i>T. Thormahlen, N. Hasler, M. Wand, H-P. Seidel</i>	
<b>Automatic and Robust Semantic Registration of 3D Head Scans</b> .....	51
<i>D.C. Schneider, P. Eisert</i>	
<b>A Novel Framework for Semantic Annotation of Soccer Sports Video Sequences</b> .....	58
<i>M.H. Kolekar, K. Palaniappan, S. Sengupta</i>	
<b>An Empirical Study of Non-rigid Surface Feature Matching</b> .....	67
<i>A. Doshi, A. Hilton, J. Starck</i>	
<b>3D Presence - a System Concept for Multi-user and Multi-party Immersive 3D Video Conferencing</b> .....	77
<i>O. Schreer, I. Feldmann, N. Atzpadin, P. Eisert, P. Kauff, H.J.W. Belt</i>	
<b>Increasing Realism and Supporting Content Planning for Dynamic Scenes in a Mixed Reality System Incorporating a Time-of-flight Camera</b> .....	85
<i>I. Schiller, B. Bartczak, F. Kellner, J. Kollmann, R. Koch</i>	
<b>Sketching Islands for a Game Environment</b> .....	95
<i>P.A.C. Varley, M. Chover, A. Puig-Centelles</i>	
<b>Low Latency Mitigation of Rain Induced Noise in Images</b> .....	105
<i>M.F. Subhani, J.P. Oakley</i>	
<b>Illumination and View Invariant Face Detection and Recognition in Images with Complex Background</b> .....	109
<i>R.S. Ghiass, E. Fatemizadeh</i>	
<b>Illumination Invariant Face Tracking and Recognition</b> .....	118
<i>M-H. Ju, H-B. Kang</i>	
<b>The Good, the Bad and the Ugly: Attractive Portraits from Video Sequences</b> .....	124
<i>G. Albuquerque, T. Stich, A. Sellent, M. Magnor</i>	
<b>Gesture Recognition Using a Laser Pointer</b> .....	128
<i>J. Rzezniak, S. Barnes, T.P. Breckon</i>	
<b>3D Reconstruction Using Graph Cut with View-dependent Polygon Texture Blending</b> .....	129
<i>K. Hisatomi, K. Tomiyama, M. Katayama, Y. Iwadate</i>	
<b>Estimating 3D Camera Motion for Rendering Audio in Virtual Scenes</b> .....	130
<i>W. Bailer, P. Arumi, T. Mateos, A. Garriga, J. Durany, D. Garcia</i>	
<b>3D Colour Mesh Detail Enhancement Driven from 2D Texture Edge Information</b> .....	131
<i>Q. Desile, R. Finnie, T.P. Breckon</i>	
<b>Region-based Foreground Extraction</b> .....	132
<i>H. Kim, A. Hilton</i>	
<b>Author Index</b>	