

VECIMS 2004

2004 IEEE INTERNATIONAL CONFERENCE ON VIRTUAL ENVIRONMENTS,
HUMAN-COMPUTER INTERFACES, AND MEASUREMENT SYSTEMS

12-14 July 2004
Boston, MA, USA

Technical Program – Preliminary Version

Monday, 12 July 2004

11:00 AM-3:00 PM - Registration

1:30 PM-2:00 PM - Opening Remarks

Mel Siegel - Carnegie Mellon University, Pittsburgh, PA, USA

Peter Wide - Örebro University, Örebro, Sweden

R. Bowen Loftin - Old Dominion University, Suffolk, VA, USA

Emil M. Petriu - University of Ottawa, Ottawa, Ontario, Canada

2:00 PM-3:30 PM - Session 1:

VE-4000 Optimized Computational Technique for Free Space Localization in 3-D
Virtual Representations of Complex Environments

P. Payeur

University of Ottawa, Canada

VE-4020 Realtime 3D Position Detection of Human Pupil

Y. Ebisawa,

Shizuoka University, Hamamatsu, Japan

VE-4021 Improving Robot Path Planning Efficiency with Probabilistic Virtual
Environment Models

P. Payeur

University of Ottawa, Canada

3:30 PM-3:45 PM – Coffee Break

3:45 PM-5:45 PM - Session 2:

VE-4005 A Study on an Efficient Embedded Java Virtual Machine with Pre-resolution
Method

Y-S. Yang (1), M-S. Jin (1), S-I. Jun (2), M-S. Jung (1)

(1) Kyungnam University, Korea

(2) Electronics and Telecommunications Research Institute, Korea

VE-4010 A Development of Intelligent and Compact Active Router System

W-H. Choi C-S. Bae, M-S. Jung

Kyungnam University, Korea

- VE-4011** An advanced Java Mobile Browser using a Box Model to display the Contents
W-H. Choi, D-G. Im, M-S. Jung
Kyungnam University, Korea
- VE-4014** Development of Active Measurement Diagnosis System Applying Java Environment Based on Embedded System
J-Y. Jung (1), K-S. Kim (2), M-S. Jung (1)
(1) Kyungnam University, Korea
(2) KERI, Changwon, Korea

Tuesday, 13 July 2004

8:00 AM-9:00 AM - Registration

8:30 AM-10:00 AM - Session 3:

- VE-4002** A Pocket-PC Based Navigational Aid for Blind Individuals
M.H. Choudhury, D. Aguerrevere, A.B. Barreto
Florida International University, USA
- VE-4006** Development of Man Machine Interface Software for an Industrial Robot
E.Y. Konukseven, A. Abidi
Middle East Technical University, Turkey
- VE-4009** Interaction of the 3D Video Free Viewpoint with a Haptic-Based Environment for Training Applications
M. Orozco, A. El Saddik
University of Ottawa, Canada

10:30 AM-10:45 PM - Coffee Break

10:45 AM-12:45 PM - Session 4:

- VE-4001** Segmentation and Quantification of Brain Tumor
C. Jiang, X. Zhang, M. Gevantmakher, C. Meinel
University of Trier, Germany
- VE-4013** An Interface for Semantic Browsing of an Images Database
A. Amato (1), V. Di Lecce (2), V. Piuri (3)
(1) Politecnico di Bari, Taranto, Italy
(2) Politecnico di Bari, Bari, Italy
(3) University of Milan, Crema, Italy
- VE-4023** Biometric Authentication Using Finger and Palmar Creases
J. Doi, M. Yamanaka
Chiba Institute of Technology, Narshino, Japan

12:45 PM-2:00 PM – Lunch

2:00 PM-3:30 PM - Session 5:

- VE-4003** Hand Posture Classification Using Wavelet Discriminative Descriptor,
Y. Sriboonruang (1), P. Kumhom (1), K. Chamnongthai (2)
(1) King Mongkut's University of Technology Thonburi, Thailand
(2) The University of the Thai Chamber of Commerce Dindaeng, Thailand
- VE-4008** Music Indexing and Retrieval
Shakra, A.El Saddik
University of Ottawa, Canada
- VE-4018** On the Effectiveness of MFCCs and its Statistical Distribution Properties in
Speaker Identification
Md.K.I. Molla, K. Hirose
The University of Tokyo, Japan

3:30 PM-3:45 PM - Coffee Break

3:45 PM-5:45 PM - Session 6:

- VE-4007** A Perceptive Multirobot System for Monitoring Electro-Magnetic Fields,
F. Amigoni, V. Caglioti, G. Fontana
Politecnico di Milano, Italy
- VE-4012** DPSD Algorithm for AC Magnetic Tracking System
Y. Liu, Y. Wang, D. Yan, Y. Zhou
Beijing Institute of Technology, China
- VE-4022-CM** A PC-Based Apparatus for Identifying Magnetization Characteristics of
Switched Reluctance Machines
S-C. Wang, W-H. Lan
Lung-Hwa University of Science and Technology, Taoyuan, Taiwan
- VE-4038-CM** Switched Reluctance Motor Commutation Using its Magnetisation
Characteristics
N.H. Mvungi
University of Dar es Salaam, Tanzania

7:00 PM – Banquet

Wednesday, 14 July 2004

8:30 AM-11:00 AM - Session 7:

- VE-4011-CM** Dynamic Alignment System for an FT-NIR Michelson Interferometer
D. Kalamatianos (1), J.M. Edmunds (2), P.E. Wellstead (2), R.J. Houston (2),
P. Liatsis (1), S.M. Christie (1), M.S. Thorniley (1), R.J. Dewhurst (1)
(1) The University of Manchester Institute of Science and Technology, UK
(2) ACImetrics Ltd, Manchester, UK

- VE-4015** Implementation of a Virtual Environment for Interacting with a Numeric Command Machine
N. Calonego Junior, C. Kirner, T.G. Kirner, A.J. Abackerli
Methodist University of Piracicaba, Brazil
- VE-4017** Development of Anti-lock Brake System in Virtual Environment
D. Yang, Z. Feng, D. Ma, G. Sun
University of Science and Technology, Hefei, China
- VE-4022** Modeling Moment of Inertia for Virtual Interactive Environments
J.C. Delannoy, E.M. Petriu
University of Ottawa, Canada
- VE-4024** A 3D-Anthropometric-Muscle-Based Active Appearance Model
M.D. Cordea (1), E.M. Petriu (1), T.E. Whalen (2)
(1) University of Ottawa, Canada
(2) Communications Research Centre, Ottawa, Canada

11:00 AM-11:15 AM - Coffee Break

11:15 AM – Closing Remarks