

2nd World Congress on Electrical Engineering and Computer Systems and Science (EECSS'16)

The congress consists of:

4th International Conference on Multimedia and Human-Computer Interaction (MHCI'16)

Room A (Zsolnay I)

3rd International Conference on Machine Vision and Machine Learning (MVML'16)

Room A (Zsolnay I)

3rd International Conference on Biomedical Engineering and Systems (ICBES'16)

Room A (Zsolnay I)

2nd International Conference on Electrical Engineering and Electronics (EEE'16)

Room B (Zsolnay II)

Registrants from the four conferences are permitted to attend any sessions from any of the four conferences.

Tuesday August 16

8:00 AM	Registration	
9:00 AM – 9:15 AM	Official Opening of Congress – Room A	
9:15 AM – 10:00 AM	MVML Keynote Lecture – Room A: <i>Data from 3D Computer Vision</i> Henrik Aanaes Technical University of Denmark, Denmark	Session Chair: Dr. Florentina Hristea
10:00 AM – 10:45 AM	EEE Keynote Lecture I – Room A: <i>Overload Control for Massive Machine Type Communications</i> Ray-Guang Cheng National Taiwan University of Science and Technology, Taiwan	

10:45 AM – 11:05 AM	Coffee Break
11:05 AM – 12:40 PM (Parallel Sessions) – Room A	
Session Name: Multimedia and Human-Computer Interaction	Session Chairs: Dr. Stephen Brewster & Dr. Henrik Aanæs
11:05 AM – 11:15 AM	MHCI 103: <i>Getting back to basics: Bimanual Interaction on Mobile Touch Screen Devices</i> Bryan Young , Andrew Wodehouse, Marion Sheridan University of Strathclyde, UK
11:15 AM – 11:25 AM	MHCI 111: <i>First Steps Towards The Emergence Of Emotions In Interaction Design</i> Lingxue Yang , Pierre Morizet-Mahoudeaux, Anne Guénand, Assia Mouloudi Université de Technologie de Compiègne, France
11:25 AM – 11:35 AM	MHCI 115: <i>A Framework for User Acceptance of Push Messaging in Mobile Apps</i> Colin Lowry, Timothy McNichols , Andrew Errity Institute of Art, Design & Technology, Ireland
11:35 AM – 11:50 AM	MHCI 102: <i>Hiding Information in 3D Printed Objects by Forming Fine Cavities inside Objects</i> Kazutake Uehira , Satoru Baba, Masahiro Suzuki, Piyarat Silapasuphakornwong, Hideyuki Torii, Youichi Takashima Kanagawa Institute of Technology, Japan
11:50 PM – 12:10 PM	MHCI 109: <i>Holographic Pyramid Using Integral Photography</i> Toshiaki Yamanouchi , Nahomi Maki, Kazuhisa Yanaka Kanagawa Institute of Technology, Japan
12:10 PM – 12:30 PM	MHCI 112: <i>Extended Fractional View Integral Photography Using Slanted Orthogonal Lenticular Lenses</i> Kazuhisa Yanaka , Takuya Nomura, Toshiaki Yamanouchi Kanagawa Institute of Technology, Japan

Tuesday

12:30 PM – 12:40 PM	<p>MHCI 110: <i>Implementation of Speaker Identification Using Speaker Localization for Conference System</i> Sung-Woo Byun, Seok-Pil Lee SangMyung University, Korea</p>
11:05 AM – 12:45 PM (Parallel Sessions) – Room B	
Session Name: Electrical Engineering and Power Systems	Session Chair: Dr. Ray-Guang Cheng
11:05 AM – 11:25 AM	<p>EEE 143: <i>CFD Simulation on Heat Exchanger Cooled Dry-type Transformers</i> Wei Wu, Yong Wang, Zepu Wang ABB Inc., USA</p>
11:25 AM – 11:45 AM	<p>EEE 128: <i>Resonant Converter with Fully-Compensated Isolation Transformer</i> Joon Heo, Seong-Jeub Jeon Pukyong National University, Korea</p>
11:45 AM – 12:05 PM	<p>EEE 127: <i>Design and Implementation of a Novel WAMPAC System for Power Network with Remote Monitoring and Control</i> R. S. RajPrasad Velammal Engineering College, India</p>
12:05 PM – 12:25 PM	<p>EEE 133: <i>Magnetic Field Exposures due to Underground Power Cables: A Simulation Study</i> Kayhan Ates, H. Feza Carlak, Sukru Ozen Akdeniz University, Turkey</p>
12:25 PM – 12:45 PM	<p>EEE 130: <i>Comparison of PID based Control Algorithms for Daily Blood Glucose Control</i> Selim Soylu, Kenan Danisman Erciyes University, Turkey</p>

Tuesday

**Group Photo of the Congress will be happening from 12:40 PM.
Please come to the registration desk to take the photo.**

12:40 PM – 1:40 PM

Lunch

1:40 PM – 2:25 PM

ICBES Keynote Lecture I – Room A:
What Can We Learn From The Brain? Functional Brain Mechanisms For Computer-Aided Diagnosis
Bart M. ter Haar Romeny
Eindhoven University of Technology, Netherlands

Session Chair:
Dr. Henrik Aanaes

2:25 PM – 3:25 PM – Room A

Session Name:
Bio-material

Session Chair:
Dr. Bart M. ter Haar Romeny

2:25 PM – 2:45 PM

ICBES 108: *Laser Micro Welding Of Nitinol for Cardiovascular Applications*
Rashmi M. Raju, Farshad Salamat-Zadeh, Gaetano Brriesci
University College London (UCL), UK

Tuesday

2:45 PM – 2:55 PM

ICBES 116: *In-Vivo Measurement of Bone Electric Properties*
Thomas Wyss Balmer, Ansó Juan, Stahel Andreas, Büchler Philippe
University of Bern, Switzerland

2:55 PM – 3:05 PM

ICBES 123: *Ultrasonic Texture Analysis in Preterm and Term Fetal Lungs*
Sleiman R. Ghorayeb, Zara Rahman, Luis Bracero
Hofstra University, USA

3:05 PM – 3:25 PM	<p>ICBES 109: <i>Head Equivalent Liquids: A Review on Composing, Recipes and Standards</i> Ugur Sorgucu, Ibrahim Develi Bartın University, Turkey</p>
3:25 PM – 3:45 PM	Coffee Break
3:45 PM – 5:35 PM – Room A	
Session Name: Machine Vision and Machine Learning	Session Chairs: Dr. Henrik Aanæs & Dr. Florentina Hristea
3:45 PM – 4:05 PM	<p>MVML 110: <i>Human Motion Detection in Manufacturing Process</i> Ágnes Lipovits, Mónika Gál, Péter József Kiss, Csaba Süveges University of Pannonia, Hungary</p>
4:05 PM – 4:25 PM	<p>MVML 104: <i>Feature selection with a budget</i> Matthias Richter, Georg Maier, Robin Gruna, Thomas Langle, and Jurgen Beyerer Karlsruhe Institute of Technology, Germany</p>
4:25 PM – 4:35 PM	<p>MVML 105: <i>Real-Time Face Tracking for Audience Engagement</i> Chengyuan Peng, Sari Järvinen, Johannes Peltola VTT Technical Research Centre of Finland LTD, Finland</p>
4:35 PM – 4:55 PM	<p>MVML 108: <i>Takagi-Sugeno-Kanga Fuzzy Fusion In Dynamic Multi-Classfier System</i> Maciej Krysmann Wroclaw University of Technology, Poland</p>

4:55 PM – 5:15 PM	<i>MVML 106: Tropical Rain Forest Monitoring and Evaluation using Image Segmentation Approach</i> Abdul Aziz K Abdul Hamid , R.U. Gobithaasan, Sumazly Sulaiman, NurSyazwani Universiti Malaysia, Malaysia
5:15 PM – 5:35 PM	<i>MVML 109: Extended Joint Deep Learning for Pedestrian Detection</i> Dae Jin Jo , Hyeon Seok Yang, Young Shik Moon Hanyang University, Korea

Wednesday

August 17

9:00 AM – 9:45 AM	MHCI Keynote Lecture – Room A: <i>Multimodal Interaction - Making The Most Of Human Capabilities In HCI</i> Stephen Brewster University of Glasglow, UK	Session Chair: Dr. Florentina Hristea
9:45 AM – 10:30 AM	ICBES Keynote Lecture II – Room A: <i>Acoustic Radiation Force Optical Coherence Elastography</i> Zhongping Chen University of California, Irvine, USA	
10:30 AM – 10:50 AM	Coffee Break	
10:50 AM – 12:10 PM – Room A		
Session Name: Biomedical Data Analysis		Session Chair: Dr. Sang Jun Kim
10:50 AM – 11:10 AM	ICBES 120: Recent Clinical Datasets in Supporting the Clinical Decision: A Portuguese Case Study Simão Paredes , Teresa Rocha, Jorge Henriques, Paulo Carvalho, Diana Mendes, João Morais Universidade de Coimbra, Portugal	
11:10 AM – 11:30 AM	ICBES 142: Obstructive Sleep Apnea Severity Multiclass Classification Using Analysis of Snoring Sounds Thanawan Praydas , Booncharoen Wongkittisuksa, Sawit Tanthanuch Prince of Songkla University, Thailand	
11:30 AM – 11:50 AM	ICBES 110: Computer-based Thermal Analysis of Brain Exposed to Near-Gigahertz Electromagnetic Field Ugur Sorgucu, Deniz Aktas , Ibrahim Develi Bartın University, Turkey	

11:50 AM – 12:10 PM	<p>ICBES 117: <i>A Time-Series Approach to Predict Obstructive Sleep Apnea (OSA) Episodes</i> Galip Ozdemir, Huseyin Nasifoglu, Osman Eroglu TOBB University of Economics and Technology, Turkey</p>	Wednesday	
12:10 PM – 1:10 PM	Lunch		
1:10 PM – 1:55 PM	<p>EEE Keynote Lecture II – Room A: <i>Analog-to-Digital and Digital-to-Analog Converters for Data Rates of 100 Gb/s and Beyond</i> Manfred Berroth Universität Stuttgart, Germany</p>	Session Chair: Dr. Stephen Brewster	
1:55 PM – 3:05 PM (Parallel Sessions) – Room A			
Session Name: Biomedical Apparatus and Devices	Session Chairs: Dr. Zhongping Chen & Dr. Taewon Seo		
1:55 PM – 2:05 PM	<p>ICBES 134: <i>Wireless Biomedical Sensor Networks: The Technology</i> Eduardo Freitas, Amândio Azevedo UMa - University of Madeira, Portugal</p>		
2:05 PM – 2:15 PM	<p>ICBES 125: <i>Biomechanical Comparison of Facet Spacer and Facet Screw for Lumbar Posterior Stability</i> Mu-Yi Liu, Ching-Lung Tai, Wen-Huang Liang, Po-Liang Lai Chang Gung University, Taiwan</p>		
2:15 PM – 2:35 PM	<p>ICBES 106: <i>Development of a Physical Apparatus and Computational Program Employing a Genetic Algorithm and Least-Squares Method for Measuring the Frictional Coefficient of the Human Ocular Surface</i> Shingo Okamoto, Sarwo Pranoto, Yuto Ohwaki, Jae Hoon Lee, Atsushi Shiraishi, Yuri Sakane, Kiyohiko Ohta, Yuichi Ohashi Ehime University, Japan</p>		

2:35 PM – 2:55 PM	<p>ICBES 103: <i>Personalized Toe Spreaders with Three-Dimensional Scanning and Printing for Hallux Valgus</i> Yong Ho Cha, Keun Ho Lee, Dong Kyu Kim, Sung Jae Kim, Sang Jun Kim Samsung Medical Center, Korea</p>
2:55 PM – 3:05 PM	<p>ICBES 143: <i>Flexible Electronics for Efficient Nerve Stimulation</i> Sefa Şimşek, Zafer Soybaş, Yakup Tatar, Merve Marçalı, Çağlar Elbüken, Bahattin Aydoğdu, Rohat Melik TOBB University of Economics and Technology, Turkey</p>
1:55 PM – 2:55 PM (Parallel Sessions) – Room B	
Session Name: Electronics	Session Chair: Dr. Manfred Berroth & Dr. Adnan Koksal
1:55 PM – 2:15 PM	<p>EEE 108: <i>A Hybrid Method for Lattice-Reduction-Aided MIMO Detection</i> Zhaofei Tian, Sanzheng Qiao McMaster University, Canada</p>
2:15 PM – 2:35 PM	<p>EEE 138: <i>Compliance Assessment of Human Body Exposure to Wireless Power Systems</i> Cheikh Mohamed, Vigneau Guillaume, Takacs Alexandru Université de Toulouse, France</p>
2:35 PM – 2:55 PM	<p>EEE 129: <i>Low Cost FPGA Implementation of Fresnel Transform for Digital Holography</i> Huan-Yuan Chen, Song-Fu Shih, Wen-Jyi Hwang, Jung-Gen Wu, Chau-Jern Cheng National Taiwan Normal University, Taiwan</p>
3:05 PM – 3:25 PM	Coffee Break

3:05 PM – 4:05 PM	Parallel Poster Session (Pg. 10)	
3:25 PM – 3:45 PM (Parallel Sessions) – Room A		
Session Name: Biomedical Modeling and Simulation		Session Chair: Dr. Bae Hwan Lee
3:25 PM – 3:35 PM	ICBES 121: <i>Numerical Simulation for the Impact of Various Abdominal Aortic Aneurysms Models</i> Taewon Seo, Sun-Young Choi Andong National University, Korea	
3:35 PM – 3:45 PM	ICBES 132: <i>Rheological Modelling of Bio-fluids Using Moving Coil Transducers</i> Ali Umit Keskin, Feride Sermin Utku Yeditepe University, Turkey	
3:25 PM – 4:45 PM (Parallel Sessions) – Room B		
Session Name: Wireless Systems		Session Chair: Dr. Manfred Berroth
3:25 PM – 3:45 PM	EEE 120: <i>A Two-Step MoM Procedure for the Analysis of Finite-Sized Tapered Slot Antennas</i> Arzu Keskin, Adnan Koksal Hacettepe University, Turkey	
3:45 PM – 4:05 PM	EEE 139: <i>Compact WLAN Monopole Antenna with L-shaped Strip Line and Spiral Line Loaded Ring Resonator</i> Merih Palandöken, Cem Baytöre, Adnan Kaya Izmir Katip Celebi University, Turkey	

4:05 PM – 4:25 PM	EEE 140: <i>A Dual-Band MIMO Monopole Antenna System for Set Top Box and WLAN Chipsets</i> Adnan Kaya, Cem Baytöre, Merih Palandöken, Irfan Kaya , Basak Ozbakis Izmir Katip Celebi University, Turkey
4:25 PM – 4:45 PM	EEE 141: <i>Detailed Modeling of Solar Inverter</i> Nezihe Yıldırım Bahcesehir University, Turkey
8:00 PM – 10:00 PM	Closing Ceremony

Poster Session

August 17

3:05 PM – 4:05 PM

MHCI 107: *Comparing Simulation Use Cases in Building Design for Developing an User-centric Simulation Platform*

Sean Hay Kim

Seoul National University of Science and Technology, Korea

MVML 103: *Fuzzy Data Association of Aerial Robot Monocular SLAM*

Yin-Tien Wang, Ting-Wei Chen

Tamkang University, Taiwan

ICBES 122: *Modification of PMMA Bone Cement for Enhancing Applicability in Vertebroplasty*

Ching-Lung Tai, Wei-De Lin, Yen-Chen Lee, Mu-Yi Liu, Lih-Huei Chen, Po-Liang Lai

Chang Gung University, Taiwan

ICBES 131: *Quantifying and Overcoming the Effect of Distraction on Cognitive Load in a Brain-Computer Interface*

Zahra Emami, Tom Chau

University of Toronto, Canada

ICBES 136: *Microinjection Technique to Relieve Neuropathic Pain by Infusion of Rapamycin into the Insular Cortex*

Bae Hwan Lee, Minjee Kwon, Ran Won

Yonsei University, Korea

ICBES 139: *Speckle Reduction of Ultrasound B-mode Image using Patch Recurrence*

Min Kim, Tai-kyong Song

Sogang University, Korea

ICBES 140: *Discrimination Of Artificial And Actual Expression On Face Using sEMG*
Ela Naz Döğ̈er, Kadir Gök, Özlener Özkan, Ömer Özkan, Hilmi Uysal, Övünç Polat, **Ömer Halil Çolak**
Akdeniz University, Turkey

EEE 104: *A Simplified Predictive Current Control for Matrix Converters with Reduced Common-mode Voltage*
Thanh-Luan Nguyen, **Hong-Hee Lee**, Tae-Won Chun
University of Ulsan, Korea

EEE 106: *Parameters determining the Information Flow in Smart Meters Complex Networks Smart Metering and Smart Grid Security*
Robert Czechowski
Wroclaw University of Science and Technology, Poland

EEE 109: *A Carbon Nanotube Field Effect Transistor-Based Circuit of Electrophysiology Retina in Neural Applications*
Ala'aDdin Al Shidaifat, **Jae Keun Song**, Yeji Han, Yong Su Park, Hanjung Song
Inje University, Korea

EEE 112: *An Area-Compact and High Power-Efficient Digital Buck Converter Using Nest-Loop Topology in 0.18um CMOS*
Van Ha Nguyen, Jinwoong Choi, Ala'aDdin Al Shidaifat, Myeong-geun Kim, Keun Yong Sohn, Hanjung Song
Inje University, Korea

EEE 122: *An Analytical Study for Two-Hop Amplify-and-Forward DS-CDMA Systems over Rayleigh/Nakagami-m Fading Channels*
Nuri Kapucu, Mehmet Bilim, Ibrahim Develi
Erciyes University, Turkey

EEE 123: *Outage Probability of DF IDMA Networks with Best Relay Selection in Weibull Fading*
Mehmet Bilim, Nuri Kapucu, Ibrahim Develi
Erciyes University, Turkey

EEE 126: *Stator shape optimization for electrical motor torque density improvement*
Hae-Joong Kim, Hee-Deuk Jun, Seung-Joo Kim, Youn Hwan Kim, Chan-Hyuk Park, **Jae-Won Moon**
Rotating Machinery Center/Korea Testing Certification, Korea

EEE 132: *Electrical Conductivity Extracted From Optical Characterization of Polysilicon Films*

Boubekeur Birouk, Jean-Pierre Raskin

Université catholique de Louvain, Belgium

EEE 136: *Compact Model of BJT enhanced Tunnel Field Effect Transistor*

Boram Yi, Boun Jun Lee, and Ji-Woon Yang

Korea University, Korea

EEE 142: *Prediction of the Electric Field Emissions around the High-voltage Power Lines using Neural Network Algorithms*

H. Feza Carlak, **Sukru Ozen**

Akdeniz University, Turkey