14th International Symposium on Medical Information Processing and Analysis

Mazatlán, Mexico

Thursday - October 25

9:00 am – 10:00 am

Talk 3

Chair: Dr. Franco Lepore

Keynote: Dr. Alan Evans

10:00 am – 11:20 am

Biosignals 2

Chair: Dr. Matt Lallas

A benchmark of heart sound classification systems based on sparse decompositions
Roilhi F. Ibarra-Hernández, Nancy Bertin , Miguel A. Alonso-Arévalo, and Hugo A. Guillén-Ramíreza
CICESE, México. Univ Rennes, Inria, CNRS, IRISA, Rennes, France.

Emotion Detection through Biomedical Signals: A Pilot Study
Domínguez-Jim´enez J.A.a , Campo-Landines K.C.b , Mart´ınez-Santos J.Ca , and Contreras-Ortiz, S.H.a aFaculty of Engineering, Universidad Tecnol´ogica de Bol´ıvar, Km 1 V´ıa Turbaco, Cartagena de Indias, Colombia bProgram of Psychology, Universidad Tecnol´ogica de Bol´ıvar, Km 1 V´ıa Turbaco, Cartagena de Indias, Colombia

Induced EEG activity during the IAPS tests and avEMT in Intimate Partner Violence Against Women
Juan M. López López, D. Carolina Cárdenas-Poveda, María Paula Acero Triviño, Alexandra González-Álvarez, Alejandra Rizo-Arévalo, Mayerli Andrea Prado-Rivera, Eliana Mejía-Soto, Jose Luis Velasquez-Perez, Catalina Espitia.
Escuela Colombiana de Ingeniería Julio Garavito, Bogotá.

Analysis of biological signals through Labview Software with possible application in the measurement of variables related to Sleep Apnea Syndrome
William D. Moscoso-Barrera, Fernando A. Cuervo-Rayo, Adolfo Castro-Benavides, Luis F. Giraldo-Cadavid and Luis M. Agudelo-Otalora
University of Navarra, Spain. University of La Sabana, Central University, Colombia.

11:50 am – 1:10 pm

Ultrasound

Chair: Dr. Armin Schwartzman

Characterization of Uterine–Cervix Phantoms' Elasticity Using Texture Features Extracted from US Images
Mónica Orozco Flores, Jorge Perez–Gonzalez, Fabián Torres Robles, Crescencio García Segundo, Scarlet Prieto Rodríguez, Lisbeth Camargo Marín, Mario Guzmán Huerta, and Verónica Medina-Bañuelos.
Universidad Autónoma Metropolitana–Iztapalapa, Universidad Nacional Autónoma de México, Ciudad de México.

Fully Automatic Segmentation and Measurement of the Fetal Femur
Daniel Colín Garnica, Jorge Perez–Gonzaleza, Scarlet Prieto Rodríguez, Lisbeth Camargo Marín, Mario Guzmán Huerta, Alma Delia Javier , Raquel Valdés Cristerna and Verónica Medina-Bañuelos.
Universidad Autónoma Metropolitana–Iztapalapa, Ciudad de México.

Segmentation and motion estimation applied to fetal heart analysis using a multi-texture active appearance model and an optical flow approach
Lorena Vargas-Quintero, Ernesto Moya-Albor, Boris Escalante-Ramírez, Lisbeth Camargo Marín, Mario Guzmán Huerta, Jorge Brieva.
Universidad Popular del Cesar, Valledupar, Colombia. Universidad Nacional Autónoma de México, Universidad Panamericana, México.

Shape model and Hermite features for the segmentation of the cerebellum in fetal ultrasound
Misael Reyes López, Fernando Arámbula Cosío, Boris Escalante-Ramírez, Jimena Olveres.
Universidad Nacional Autónoma de México (UNAM), Mexico City.

Cardiac Imaging

Chair: Dr. Jorge Brieva

Automatic segmentation of the left ventricle myocardium in congenital heart diseases by saliency features
Miguel A. Beltran, Angélica Atehortúa and Eduardo Romero.
Universidad Nacional de Colombia.

Automatic centerline extraction of left coronary artery from X–ray rotational angiographic images
Gerardo Chacón, Johel Rodríguez, Valmore Bermúdez, Miguel Vera, Delia Madriz , and Antonio Bravo.
Universidad Simón Bolívar, Universidad de Pamplona, Colombia. Universidad de Los Andes–Táchira, Universidad Nacional Experimental del Táchira, Venezuela.

A new binary descriptor for the automatic detection of coronary arteries in X-ray angiograms
Ivan Cruz-Aceves , Fernando Cervantes-Sanchez and Martha A. Hernández-González.
CONACYT, CIMAT, Guanajuato, México.

A local multiscale variational approach for left ventricle analysis in cardiac images
Leiner Barba-J, Boris Escalante-Ramírez, Enrique Vallejo Venegas.
Universidad Popular del Cesar, Valledupar, Colombia. Universidad Nacional Autónoma de México, México.

2:00 am – 3:30 pm

Talk 4

Chair: Dr. Natasha Lepore

Keynote: Dr. Matt Lallas

4:00 pm – 6:00 pm

Brain Imaging 2

Chair: Dr. Franco Lepore

A study of single subject VBM and DARTEL on healthy subjects
Hernan Claudio Kulsgaarda, Delfina Braggio, Mariana Bendersky, Lucia Alba Ferrara, and Ignacio Larrabide.
Universidad Nacional del Centro de la Provincia de Buenos Aires, Tandil, Buenos Aires University School of Medicine, Austral University, Buenos Aires, Argentina.

Description of brain volumetric changes in Alzheimer disease using region-based morphometry
Sebastian Maglioni, Diana L. Giraldo, Juan Duarte, Nelson Velasco, and Eduardo Romero.
Universidad Nacional de Colombia, Universidad Militar Nueva Granada, Bogotá, Colombia. University of Antwerp, Antwerp, Belgium.

Automatic classification of cortical thickness patterns in Alzheimer's disease patients, using the Louvain modularity clustering method
Fabian W. Corlier, Daniel Moyer, Meredith N. Braskie, Paul M. Thompson, Guillaume Dorothee, Marie Claude Potier, Marie Sarazin, Michel Bottlaender, and Julien Lagarde.
Keck School of Medicine of USC, University of Southern California, CA, USA. Université Paris Descartes, Paris, France. Université Paris Sud, CNRS, Université Paris-Saclay, Orsay, France.

Sulcal-based morphometry in Parkinson's disease: A study of reliability and disease effects
Fabrizio Pizzagalli, Guillaume Auzias, Armand Amini, Joshua Faskowitz, Faisal Rashid, Dan Moyer, Peter Kochunov, Denis Rivière, Jean-François Mangin, Paul M. Thompson, Neda Jahanshad.
University of Southern California, USA. Aix-Marseille Université & CNRS, Marseille, France. Univ. of Maryland School of Medicine, Baltimore, USA.

Alternative diffusion anisotropy measures for the investigation of white matter alterations in 22q11.2 deletion syndrome
Julio E. Villalon-Reina, Christopher R.K. Ching, Deydeep Kothapalli, Daqiang Sun, Talia Nir, Amy Lin, Jennifer K. Forsyth, Leila Kushan, Ariana Vajdi, Maria Jalbrzikowski, Laura Hansen, Rachel K. Jonas, Therese van Amelsvoort, et.al.
Keck School of Medicine of the University of Southern California, University of California at Los Angeles, , University of Pittsburgh, Upstate Medical University, NY, University of Pennsylvania, Philadelphia, USA. Maastricht University, Netherlands, University of Newcastle, Australia, Cardiff University, Cardiff, Wales, UK.

Treatment related DTI changes in the posterior thalamic radiation in survivors of childhood posterior fossa tumors
Tanedo, J., Tsao, S., Gajawelli, N., Lepore, N., and Baron Nelson, M.
University of Southern California(USC), Keck School of Medicine, USC, Los Angeles, CA, USA.