



Wednesday - November 18

09:00 - 10:00

Keynote

Room: Architecture Auditorium

Brain: Structure

Room: Architecture Auditorium

Chair: Paul Yushkevich

MR image analysis for patient-specific modeling and quantification

Norberto Malpica
Universidad Politécnica de Madrid

10:15 - 11:35

Finding models to detect Alzheimer's disease by fusing structural and neuropsychological Information

Diana L. Giraldoa, Juan D. García-Arteaga, Nelson Velasco, Eduardo Romero
Universidad Nacional de Colombia

Magnetic Resonance brain tissue segmentation based on sparse representations

Andrea Rueda
Pontificia Universidad Javeriana, Colombia

Abnormal Ventricular Development in Preterm Neonates with Visually Normal MRIs

Jie Shi, Yalin Wang, Yi Lao, Rafael Ceschin, Liang Mi, Marvin D. Nelson, Ashok Panigrahy, Natasha Leporé
Arizona State University, University of Southern California, Children's Hospital Los Angeles, USA

Neurocranial Development in the Infant Brain

Niharika Gajawella, Sean Deonic, Jie Shi, Liang Xu, Holly Dirks, Douglas Dean, Jonathan O'Muircheartaigh, Siddhant Sawardekar, Andrea Ezis, Marvin D. Nelson, Yalin Wang, Natasha Leporé
Children's Hospital Los Angeles, University of Southern California, Brown University, Arizona State University, USA

Quantifying the Parkinson's Disease progression by Simulating gait patterns

Luisa Cárdenas, Fabio Martínez, Angélica Atehortúa, Eduardo Romero
Universidad Nacional de Colombia

A Characterization of the Parkinson's Disease by describing the Visual Field motion During Gait

David Trujillo, Fabio Martínez, Angélica Atehortúa, Charlens Alvarez, and Eduardo Romero
Universidad Nacional de Colombia, Bogotá, Colombia

Ipsilateral coordination features for automatic classification of the Parkinson Disease

Fernanda Sarmiento, Angélica Atehortúa, Fabio Martínez, and Eduardo Romero
Universidad Nacional de Colombia, Bogotá, Colombia

Kinematic Parameter Estimation Using Close Range Photogrammetry for Sport Applications

Luz Alejandra Magre Coloradoa and Juan Carlos Martínez Santos
Universidad Tecnológica de Bolívar, Cartagena de Indias, Colombia.

13:30 - 14:30

Parkinson & Kinematics

Room: Cesar Dávila Andrade

Chair: Eduardo Romero

Keynote

Room: Architecture Auditorium

Digital Health as Disruptive Innovation

Fernando Mora
Universidad Simón Bolívar

14:30 - 15:50

Automatic right ventricle (RV) segmentation by propagating a basal spatio-temporal characterization

Angélica Atehortúa, María A. Zuluaga, Fabio Martínez and Eduardo Romero
Universidad Nacional de Colombia, Bogotá, Colombia

Level Sets algorithms Comparison for Multi-Slice CT Left Ventricle Segmentation

Ruben Medina, Alexandra La Cruz, Andrés Ordoñez, Daniel Pesantez, Villie Moroco, and Pablo Vanegas
Universidad de Cuenca, Cuenca, Ecuador

Reduction of Blooming Artifacts in Cardiac CT Images by Blind Deconvolution and Anisotropic Diffusion Filtering

Ángela M. Castillo-Amor, Cristian A. Navarro-Navia, Alberto J. Cadena-Bonfanti and Sonia H. Contreras-Ortiz
Universidad Tecnológica de Bolívar, Cartagena de Indias, Colombia

Motion Magnification using the Hermite Transform

Jorge Brieza, Ernesto Moya-Albor, Sandra L. Gomez-Coronel, Boris Escalante-Ramirez, Hiram Ponce and Juan Mora
Universidad Panamericana, Instituto Politécnico Nacional, Universidad Nacional Autónoma de México, México D.F.

Heart & Movement

Room: Architecture Auditorium

Chair: Jorge Brieza

Data Analysis

Room: Cesar Dávila Andrade

Chair: Vladimir Robles

Lipid-anthropometric index optimization for insulin sensitivity estimation

J. Velásquez, S. Wong, L. Encalada, H. Herrera, E. Severein,
Universidad Simón Bolívar, Venezuela, Universidad de Cuenca, Ecuador

Spanish language generation engine to enhance the syntactic quality of AAC systems

Cristian Narváez A., Sebastián Sastogue H. and Marcela Iregui G.
Universidad Militar Nueva Granada, Bogotá, Colombia

Critical Events in Mechanically Ventilated Patients

Filipe Portela, Manuel Filipe Santos, José Machado, António Abelha, Álvaro Silva, Fernando Rua
University of Minho, Portugal, Centro Hospitalar do Porto, Porto, Portugal

Classification of antimicrobial peptides with imbalanced datasets

Francy L. Camacho, Rodrigo Torres, Raúl Ramos Pollán
Universidad Industrial de Santander, Colombia

Reduction of resting state network segregation is linked to disorders of consciousness

Jorge Rudas, Darwin Martínez, Javier Guaje, Athena Demertz, Lizette Heine, Luaba Tshiband, Andrea Soddu, Steven Laureys, and Francisco Gómez
Universidad Nacional de Colombia, Universidad Central de Colombia, Bogotá, Colombia,
University of Liege, Liege, Belgium, Western University, London, Canada

Automatic identification of Resting State Networks: An extended version of Multiple Template-Matching

Javier Guaje, Juan Molina, Jorge Rudas, Athena Demertz, Lizette Heine, Luaba Tshiband, Andrea Soddu, Steven Laureys and Francisco Gómez
Universidad Nacional de Colombia, Universidad Central de Colombia, Bogotá, Colombia,
University of Liege, Liege, Belgium, Western University, London, Canada

Low-frequency fluctuation amplitude analysis of resting-state fMRI for sickle cell disease patients

John Colognera, Yeun Kima, Adam Bush, Matt Borzage, Vidy Rajagopalan, Natasha Lepore, and John Wood
Children's Hospital, Los Angeles, Rudi Schulte Research Institute, Santa Barbara CA, Los Angeles

16:10 - 18:00

Tutorials

Non-invasive Imaging Methods in the Neonatal Brain

Mathieu Dahaes
University of Montréal, Canada

Room: Architecture Auditorium

Effects of central and peripheral visual loss

Franco Lepore
Université de Montréal, Canada

Room: Cesar Dávila Andrade