



ISICS 2018

International Symposium on Intelligent Computing Systems

March 21-23, 2018 | Merida, Mexico

PROGRAM

Organizing Committee

General Chairs

Anabel Martin-Gonzalez (UADY, Mexico)
Víctor Uc-Cetina (UADY, Mexico)

Symposium Co-Chairs

Bassam Ali (UADY, Mexico)
Carlos Brito-Loeza (UADY, Mexico)
Eduardo Espadas (UPY, Mexico)
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Arturo Espinosa Romero (UADY, Mexico)

Poster Session Chair

Ricardo Legarda-Saenz (UADY, Mexico)
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Wednesday, March 21

8:00 - 16:00 Registration (*Auditorium "Manuel Cepeda Peraza"*)

9:30 - 9:45 Opening Session

10:00 - 11:00 **Keynote Dr. Leo Jaskowicz**
Hebrew University of Jerusalem, Israel
Computer-based tumors analysis and follow-up in radiological oncology

11:00 - 11:30 Coffee Break (*Auditorium's Lobby*) &
Poster Session I (*Auditorium's Hall*)

11:40 - 12:55 **Oral Session I**

Chair: Dr. Victor Uc-Cetina (Universidad Autónoma de Yucatán)

- **Tree-structured CNN for the Classification of Surgical Instruments**
Paula Catalina Useche Murillo, Javier Orlando Pinzón Arenas, and Robinson Jiménez Moreno
- **Analyzing Students Reviews of Teacher Performance Using Support Vector Machines by a Proposed Model**
G. Gutiérrez, J. Ponce, A. Ochoa, and M. Álvarez
- **Zero-Shot Learning with Partial Attributes**
Matías Molina and Jorge Sánchez

12:55 - 14:25 Lunch (not included in the conference package)

14:30 - 15:30 **Keynote Dr. Jesús Savage Carmona**
Bio-Robotics Laboratory, Mexico
Service Robots in an Intelligent House

15:30 - 16:00 Coffee Break (*Auditorium's Lobby*) &
Poster Session II (*Auditorium's Hall*)

16:10 - 17:25 **Oral Session II**

Chair: Dr. Paul Erick Méndez Monroy (IIMAS-UNAM)

- **Deep Learning for Photovoltaic Power Plant Forecasting**
E. J. Alejos Moo, J. Tziu Dzib, Jorge Canto-Esquivel, and A. Bassam
- **Forecast and Energy Management of a Microgrid with Renewable Energy Sources using Artificial Intelligence**
E. Cruz May, L. J. Ricalde, E. J. R. Atoche, A. Bassam, and E. N. Sánchez
- **Intelligent Recognition System of Myoelectric Signals of Human Hand Movement**
Sergio A. Vicario Vazquez, Outmane Oubram, and Bassam Ali

17:30 - 19:15 Guided visit of Merida (operated by Turibus, 57 street)

Thursday, March 22

9:00 - 15:00 Registration

10:00 - 11:00 **Keynote Dr. Reinhard Klette**
Auckland University of Technology, New Zealand
Mono-, Bi-, or Tri-nocular Vision for Self-driving Cars

11:00 - 11:30 Coffee Break (*Auditorium's Lobby*) &
All-Posters Session (*Auditorium's Hall*)

11:40 - 12:55 **Oral Session III**

Chair: Dr. Arturo Espinosa-Romero (Universidad Autónoma de Yucatán)

- **Object Recognition using Hierarchical Temporal Memory**
Fabián Fallas-Moya and Francisco Torres-Rojas
- **A Selective Segmentation Model for Inhomogeneous Images**
Lavdie Rada, Haider Ali, and Niyaz Ali Khan
- **Knee-ankle Sensor for Gait Characterization: Gender Identification Case**
Fabiola Monrraga Bernardino, Eddy Sánchez-DelaCruz, and Iván Vladimir Meza Ruíz

12:55 - 14:25 Lunch (not included in the conference package)



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14:30 - 15:30 **Keynote Dr. Andrew Barto**
University of Massachusetts, USA
Reinforcement Learning: Connections, Surprises, and Challenges

15:30 - 16:00 Refreshment Break

16:00 - 17:15 **Oral Session IV**

Chair: Dr. Carlos Brito-Loeza (Universidad Autónoma de Yucatán)

- **Methodology for Learning Multimodal Instructions in the Context of Human-Robot**
Saith Rodríguez, Carlos A. Quintero, Andrea K. Pérez, Eyberth Rojas, Oswaldo Peña, and Fernando De La Rosa
- **Identification of Multimodal Signals for Emotion Recognition in the Context of Human-Robot Interaction**
Andrea K. Pérez, Carlos A. Quintero, Saith Rodríguez, Eyberth Rojas, Oswaldo Peña, and Fernando De La Rosa
- **A Review of SAR Hybrid De-Speckling Methods**
Memoona Malik, Muhammad Haris, Aamir Hanif Dar, Asad Ali Safi, and Mahmood Ashraf

17:15 - 17:30 **Closing Session**

19:00 - 20:30 ISICS Dinner (*La Chaya Maya Restaurant, 55 street, No. 510, Centro*)

Friday, March 23

13:00 - 21:30 Archaeological Tour to **Uxmal**, including the Light and Sound show (not included in the conference package)



Poster Session I (*Auditorium's Hall*)

- P01 • A New variational model for binary classification in the supervised learning context**
Carlos Brito-Pacheco and Carlos Brito-Loeza
- P02 • Sistema de navegación de vehículos autónomos basado en Real-Time Kinematics**
Alex Antonio Turrizo-Suarez, Arturo Espinosa-Romero, and Anabel Martin-Gonzalez
- P03 • Aplicación de un mapa auto-organizado en el análisis de series de tiempo**
Laura Cristina Alonzo-Canul and Erik Molino-Minero-Re
- P04 • Desarrollo de un entorno de simulación robótica utilizando Gazebo**
Carlos Acosta-Montalvo, Carlos Brito-Loeza, and Arturo Espinosa-Romero
- P05 • Diseño de sistema de seguridad y prototipo β para un robot explorador en ambientes hostiles, por intervención bruta del control y reubicación espacial en zona segura**
Alejandro Lupiáñez Bellido and Israel Sánchez Domínguez
- P06 • Diseño, simulación, construcción y caracterización de transductores ultrasónicos**
J. Valladares, P.E. Méndez-Monroy, and I. S. Dominguez
- P07 • Sistema de adquisición y registro de datos con aplicación de hidrófono**
Alvaro Callejas-Tavera and Erik Molino-Minero-Re
- P08 • Plataforma automatizada para monitoreo cardiaco en ratones**
H. A. Canul-Irigoyen, C. A. Ku-Maldonado, E. Molino-Minero-Re, N. Hevia-Montiel, and A. P. Haro-Álvarez
- P09 • Diseño e implementación para el control de sensores a través de un instrumento virtual con Arduino**
J. Hernández, P. Méndez, and I. S. Dominguez
- P10 • Implementación de un sistema de reconocimiento de patrones para clasificar señales de espectro Doppler**
Ismael de J. Ávila Uc, Nidiyare Hevia-Montiel, Erik Molino-Minero-Re, and Paulina Haro
- P11 • Fish species classification (Mero and Chac-Chi) using otolith images and pattern recognition**
Javier Luna González, Nidiyare Hevia-Montiel, Erik Molino Minero Re, and María del Carmen Clemente Medina



Poster Session II (*Auditorium's Hall*)

- P12 • Computational analysis in images of unicellular electrophoresis on gel using automatic segmentation algorithms**
Javier Luna-Gonzalez, Anabel Martin-Gonzalez, Carlos Brito-Loeza, and Elda Pacheco-Pantoja
- P13 • Clasificación de señales Doppler de ultrasonido en modelo murino con algoritmos de aprendizaje no supervisados**
Israel Borges-Chan, Nidiyare Hevia-Montiel, Erik Molino-Minero-Re, and Ana Paulina Haro Álvarez
- P14 • Morphometric Classification of Primary Brain Tumors using K-Nearest Neighborhood Algorithm**
Angel Carrillo-Bermejo, Nidiyare Hevia-Montiel, Anabel Martin-Gonzalez, and William M. Rosado Jr
- P15 • Desarrollo de un sistema de visión computacional para el aterrizaje autónomo de un VANT**
Manuel Poot-Chin, Carlos Brito-Loeza, Ricardo Legarda-Saenz
- P16 • Interfaz gráfica para la clasificación de señales de efecto Doppler ultrasónico a partir de algoritmos de aprendizaje supervisado y no supervisado**
J. R. Coba Tun, J. P. González González, N. Hevia-Montiel, E. Molino-Minero-Re, Paulina Haro
- P17 • Automatic morphological analysis of left ventricle**
Félix Román Ehuan Collí, Nidiyare Hevia-Montiel, Ana P. Haro Álvarez
- P18 • Generación de ortomosaicos con base en el modelo 3D de la superficie terrestre obtenido mediante un dron**
Omar Martinez-Aranda, Arturo Espinosa-Romero, A. Martin-Gonzalez
- P19 • Un modelo matemático simple del calentamiento global**
Daniel Antonio Brito Pacheco
- P20 • Estación de monitoreo para el cultivo de lenteja de agua**
Juan Negron-Granados, Rafael Viana, Mildred González, Geenkel Coss, Rajiv González, and Sergio Gongora
- P21 • Quantifying Empathy using Time Series Correlations: Analysis of the reactions of mexicans in September earthquakes**
J. Alberto Rosales Pérez
- P22 • Preprocessing information applied to a commercial data store**
Sidney René Toledo Martínez, Eddy Sánchez-DelaCruz, Rajesh Roshan Biswal, and Gandhi Samuel Hernández Chan



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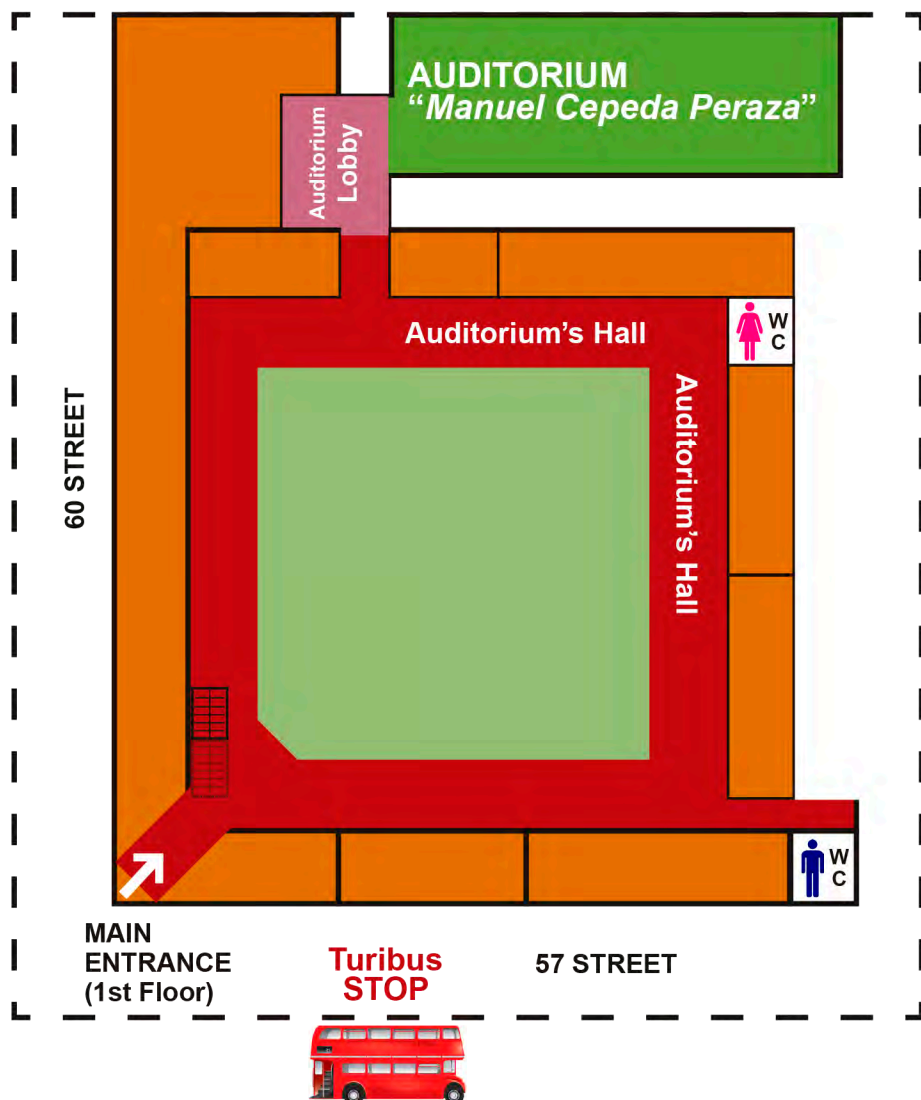
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Venue Floorplan

Universidad Autónoma de Yucatán - Main Conference Rooms

Venue Building - 2nd FLOOR





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City Guided-Tour

The city guided-tour will be a sightseeing tour operated by **Turibus**. The tour will start and end at the bus stop located at 57 street (at the side of the venue). The tour will take about 1 hour and 45 min (non-stop).

Turibus Route Map



Holiday Inn



Catedral



Parque de Santa Ana



Monumento a la Patria



Parque de las Américas



Catedral



Teatro Peón Contreras



Palacio G. Cantón



Iglesia de Itzimná

