

SmartTech-IC 2019: First International Conference on Smart Technologies, Systems and Applications

Quito – Ecuador

The Conference Final Program

	Monday, December 2	
8:00 – 9:00	Registration	
9:00 – 10:00	Conference Opening	
10:00 – 11:00	Keynote: "Smarter medical devices through massive, longitudinal data analytics", Alfredo Hernández, Ph.D <i>Research Director at the French National Institutes of Health and Medical Research (INSERM) (France)</i>	
11:00 – 11:30	Coffee Break	
11:30 – 12:30	Keynote: "Multiclassifiers - improving the performance of predictive models", César Ferri, Ph.D <i>Universitat Politècnica de València (Spain)</i>	
12:30 – 14:00	Lunch	
	Session I: Smart Health (Sala Multiple 1) Chair: Fabián Narváez	Session II: Smart Systems (Sala Multiple 2) Chair: Julio Proaño
14:00 – 14:20	Technological Platform for the Control of the Supply of Medication to People with Diabetes. Authors: Mauro Callejas-Cuervo, Juan Pablo Contreras Barrera and David Leonardo Cárdenas Rengifo (Colombia)	Enabling the Latent Semantic Analysis of Large-Scale Information Retrieval Datasets by means of Out-Of-Core Heterogeneous Systems, Authors: Gabriel Alejandro León Paredes, Liliana Ibeth Barbosa Santillán and Antonio Pareja Lora (Ecuador)
14:20 – 14:40	Knowledge transfer in Convolutional Neural Networks to enhance model performance in mammogram classification, Authors: Roberto Arias, Fabián Narváez and Hugo Franco (Colombia)	The network virtualization to support the scalability of the Internet of Things, Authors: Carlos Javier Gonzalez, Olivier Flauzac and Florent Nolot (Panamá)
14:40 – 15:00	Fusion of 3D Radiomic Features from multiparametric Magnetic Resonance Images for Breast Cancer Risk Classification, Authors: Diana Marcela Marín Castrillón, Jaider Stiven Rincón, Liliana María Hernández, Andrés Eduardo Castro Ospina and Gloria M. Díaz (Colombia)	Factors that Affect I-Vectors Based Language Identification Systems, Authors: David Romero, Christian Salamea, Fernando Chica and Erick Narvaez (Ecuador)
15:00 – 17:00	Tutorial: Deep learning for biological image analysis, Juan C. Caicedo, Ph.D (Aula Magna)	Tutorial: Motion estimation: from analytical to learning-based methods, Antoine Manzanera, Ph.D (Auditorio Padre Carollo)

	Tuesday, December 3	
8:00 – 9:00	Registration	
9:00 – 10:00	Keynote: “Biological treatments analysis using deep learning “ Juan C. Caicedo, Ph.D <i>Broad Institute of MIT and Harvard (USA)</i>	
10:00 – 11:00	Keynote: “Learning different visual cues for 3d reconstruction from videos ” Antoine Manzanera, Ph.D <i>ENSTA ParisTech - Autononous Systems and Robotics Laboratory (France)</i>	
11:00 – 11:30	Coffee break	
	Session II: Smart Trends (Aula Magna) Chair: Hugo Franco	Session III: Smart grid and Renewable Energy (Sala Multiple 2) Chair: Leony Ortiz
11:30 – 11:50	Using machine learning and information visualisation for discovering latent topics in Twitter news , Authors: Vladimir Vargas-Calderón, Marlon Steibeck Dominguez, Nicolás Parra, Herbert Vinck-Posada and Jorge E. Camargo (Colombia)	Scalable Electrical Distribution Networks Planning for Medium and Low Voltage considering Capacity on Transformers and Voltage Drop , Authors: Milton Ruiz, Esteban Inga and Silvio Simani (Ecuador)
11:50 – 12:10	Latent Semantic Index: a Microservices Architecture , Authors: Julio Proaño, Jonnathan Juma and Andrés Reinoso (Ecuador)	Performance Analysis of a Direct-Expansion Solar-Assisted Heat Pump Using a Photovoltaic/Thermal System for Water Heating , Authors: William Quitiaquez, Isaac Simbaña, César Isaza, César Nieto-Londoño, Patricio Quitiaquez and Luis Toapanta (Ecuador)
12:10 – 12:30	A content-based multi label classification model to suggest tags for posts in Stack Overflow , Authors: Fredy A. Moreno and Jorge E. Camargo (Colombia)	Spectral power map generation based on spectrum scanning in the ISM band for interference effects , Authors: Benjamin Huertas Herrera, David Goéz Sánchez and Erick Reyes Vera (Colombia)
12:30 – 14:00	Lunch	
	Session V: Smart Systems II (Aula Magna) Chair: Gloria Díaz	Session VI: Smart Applications (Sala Multiple 2) Chair: Julio Proaño
14:00 – 14:20	A Genetic Algorithm for BAP + QCAP with imprecision in the arrival of vessels , Authors: Flabio Gutierrez, Edwar Lujan, Jose Rodríguez-Melquiades and Miguel Jimenez-Carrion (Perú)	Emotion Recognition From Time-Frequency Analysis in EEG Signals Using Deep Learning Approaches . Authors: Rubén Darío Fonnegra Tarazona, Pablo Campaz Usuga, Kevin Osorno Castillo and Gloria Mercedes Díaz Cabrera (Colombia)
14:20 – 14:40	Data Analysis of Particle Physics Experiments Based on Machine Learning , Author: Huber Nieto-Chaupis (Perú)	Incorporation of Language Discriminative Information into Recurrent Neural Networks Models to LID tasks . Authors: Christian Salamea, Ricardo Cordoba, Luis Fernando D'Haro and David Romero (Ecuador)
14:40 – 15:00	Implementation of a Real-Time Monitoring and Analysis System for Luminous Flux Test in Integrating Sphere , Authors: Ronny Omar De La Bastida Chiza, Ricardo David Araguillin López, Nelson Sotomayor Orozco and Consuelo Carolina Chasi Gallo (Ecuador)	Hand Angle Estimation Prediction from Neural Networks using sEMG and Inertial Sensors . Authors: Alfredo Lobaina Delgado, Cesar Quinayas, Andrés Ruiz, Adson Ferreira da Rocha and Alberto López Delis (Cuba)
15:00 – 17:00	Tutorial: Evaluating classifiers, Cesar Ferri, Ph.D (Aula Magna)	Tutorial: Smart medical devices, Alfredo Hernandez, Ph.D (Aud. Padre Carollo)

	Wednesday, December 4	
8:00 – 9:00	Registration	
9:00 – 10:00	Keynote: “Smart-Health for aiding diagnosis, beyond of machine learning” Gloria Díaz, Ph.D <i>Instituto Tecnológico Metropolitano (Colombia)</i>	
	Session VII: Smart Systems III (Sala Multiple 1) Chair: Diego Vallejo	Session VIII: e-learning and informatics (Sala Multiple 2) Chair: Paulina Morillo
10:00 – 10:20	Quantum Mechanics Theory of BitCoins-Based Processes. Author: Huber Nieto-Chaupis (Perú)	Increasing K-Means clustering algorithm effectivity for using in source code plagiarism detection. Authors: Michal Ďuračík, Patrik Hrkút, Miroslava Mikusova and Mauro Callejas-Cuervo (Eslovaquia)
10:20 – 10:40	Signal Detection Methods in Cognitive Mobile Radio Networks: A Performance Comparison. Authors: Pablo Palacios, Milton Román-Cañizares, Carlos Saavedra and Julio Freire (Chile)	Corrective Feedback Through Mobile Apps for English Learning. Author: Adriana Guanuche (Ecuador)
10:40 – 11:00	Soil and Environmental Monitoring in a Vineyard in the Guadalupe Valley as a Tool for Processes of Precision Viticulture based on ZigBee Technology to improve E-Agriculture. Authors: Josue Lopez, Ariana Talamantes, Eduardo Sanabia, Luis Aguilera, Guillermo Gastelum and Oscar Meza (Mexico)	Proposal for an Integral System for massive open online courses (ISMOOC). Authors: Lourdes Atiaja Atiaja and Andrés García Martínez (Ecuador)
11:00 – 11:30	Coffee break	
	Session IX: Smart Health II (Sala Multiple 1) Chair: Diego Vallejo	Session X: Information Security (Sala Multiple 2) Chair: Julio Proaño
11:30 – 11:50	Estimation of spatio-temporal parameters of gait using an inertial sensor network. Authors: Marcelo Bosmediano and Fabián Narváez (Ecuador)	Classification and visualization of web attacks using HTTP headers and machine learning techniques. Authors: Nicolás Ricardo Enciso and Jorge Camargo (Colombia)
11:50 – 12:10	Benchmarking of classification algorithms for psychological diagnosis. Authors: Jhony Llano, Vanessa Ramírez and Paulina Morillo (Ecuador)	Broadcast and Analysis of traffic warning messages in a VANET network. Authors: Luis Naula and Andres Segovia (Ecuador)
12:10 – 12:30	Automatic Exercise Recognition based on Kinect Sensor for Telerehabilitation. Authors: Fernando Velasco and Fabián Narváez (Ecuador)	A survey on Security Mechanisms in NoSQL DBMSs. Authors: Irving L. Solsol, Héctor F. Vargas and Gloria M. Díaz (Colombia)
12:30 – 14:00	Lunch	
14:00 – 16:00	Forum: Social Responsibility in Research Practice, Esteban Inga, PhD. (Aula Magna)	
16:00 – 17:00	Conference Closing (Cultural Event)	