



SESSIONS PROGRAM

Chetumal local time (EST — Eastern Standard Time)
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 (in other systems search time as Cancún, Quintana Roo, México).

SESSION A: SOFTWARE REQUIREMENTS I (November 04, 2020)

	Paper ID.	Title	Authors	Institution	Chair
12:30 - 13:00	3	Helping organizations manage the innovation process to join the Cognitive era	Karla Olmos-Sánchez, Jorge Rodas-Osollo	Universidad Autónoma de Ciudad Juárez	Jorge Aguilar
13:00 - 13:30	30	Requirements Prioritization Techniques in the last decade: A Systematic Literature Review	Juan Carlos B. Somohano-Murrieta, Jorge Octavio Ocharán-Hernández, Angel J. Sánchez-García, Maria de los Ángeles Arenas-Valdés	Universidad Veracruzana	
13:30 - 14:00	31	A Systematic Literature Review on Machine Learning for Automated Requirements Classification	Manuel Pérez-Verdejo, Angel J. Sánchez-García, Jorge Octavio Ocharán-Hernández	Universidad Veracruzana	
14:00 - 14:30	34	Analysis and Perspectives of Requirements for Detector Control Systems in High-Energy Physics Experiments	Cabanillas-Noris Juan Carlos, León-Monzón Ildelfonso, Rojas-Torres Solangel, Martínez-Hernández Mario Iván, Mejía-Camacho Juan Manuel.	National Technological of Mexico	

SESSION B: SOFTWARE REQUIREMENTS II (November 04, 2020)

	Paper ID.	Title	Authors	Institution	Chair
11:00 - 11:30	47	Context-based Model of the Progression of Information Capture in Software Requirements Elicitation	Dante Carrizo, Cristian Ortiz	Universidad de Atacama	Juan Pablo Ucán Pech
11:30 - 12:00	51	Una propuesta de solución a los problemas del manejo de los Requerimientos para la Formación de Profesionales Líderes de Proyectos	Vanessa Vargas Pérez, Laura Vargas Pérez, Ana María Soto Hernández	UNIVERSIDAD INTERNACIONAL IBEROAMERICANA	
12:00 - 12:30	66	Esencialización de la Práctica Gestión de Requisitos de RUP	Jhonny Eddison Chapal Vallejo, John Snyder Guerrero Riascos, Alexander Barón Salazar	Universidad de Nariño	

SESSION C: DISTRIBUTED LEDGER TECHNOLOGY (November 04, 2020)

	Paper ID.	Title	Authors	Institution	Chair
11:00 - 11:30	29	Consensus Mechanisms in Distributed Ledgers for the Protection of Confidential Data: A Multivocal Literature Review	Renato Vargas-Gómez, Juan Carlos Pérez-Arriaga, Jorge Octavio Ocharán-Hernández, Angel J. Sánchez-García	Universidad Veracruzana	Carlos Fernández
11:30 - 12:00	39	Método para el desarrollo de aplicaciones descentralizadas basadas en blockchain	José Balderas-Rosas, Ulises Juárez-Martínez, Lizbeth Rodríguez-Mazahua, Beatriz Olivares-Zapahua, Adolfo Centeno Téllez	Tecnológico Nacional de México Campus Orizaba	
12:00 - 12:30	48	Blockchain Software System Proposal Applied to Electric Self-driving Cars Charging Stations: A TSP Academic Project	Jorge R. Aguilar Cisneros, Carlos Alberto Fernández-y-Fernández, Jesús Juárez Vázquez	UPAEP	

SESSION D: MODELING AND PROCESSES I (November 04, 2020)

	Paper ID.	Title	Authors	Institution	Chair
12:30 - 13:00	17	Diseño de arquitectura para una aplicación tipo E-learnig empleando Wolfram Mathematica en la evaluación de ejercicios de geometría básica	David Alberto Beltrán Calleja, Luís Ángel Reyes Hernández, Ignacio López Martínez, Celia Romero Torres, Asdrúbal López-Chau	Instituto Tecnológico de Orizaba	Samantha Jiménez
13:00 - 13:30	18	MOSCAF – Specifying Data Quality Requirements according Web Functionalities	César Guerra-García, Hector G. Perez-Gonzalez, Reyes Juárez-Ramírez, Marco Ramírez-Torres, Hugo González	Universidad Autónoma de San Luis Potosí	
13:30 - 14:00	26	A software tool to generate a Model-View-Controller architecture based on the Entity-Relationship Model	Alan Ramírez-Noriega, Yobani Martínez-Ramírez, Jesús Soto, Jesús Antonio Chávez Lizárraga, Kevin Vázquez Niebla	Universidad Autónoma de Sinaloa	
14:00 - 14:30	28	A Tool for Reducing Implementation Defects for Requirements based on Large Decision Tables	Ricardo Tlamatini Olvera Ochoa, Gerardo Padilla Zarate	ITESM Zapopan	

SESSION E: MODELING AND PROCESSES II (November 04, 2020)

	Paper ID.	Title	Authors	Institution	Chair
12:30 - 13:00	41	Success Factors in the adoption of CMMI-DEV Maturity Levels in Software Development Organizations in Baja California, Mexico	Brenda L. Flores-Rios, María Angélica Astorga-Vargas, Jorge E. Ibarra-Esquer, Juan Pablo García-Vázquez, Reyes Juárez-Ramírez, Raúl Antonio Aguilar Vera	Universidad Autónoma de Baja California	Raúl Aguilar
13:00 - 13:30	42	Explorando la Influencia de los Roles de Belbin en la Calidad del Diseño Lógico de una Base de Datos generado por estudiantes de Ingeniería de Software	Raúl Antonio Aguilar Vera, Adriana Peña Pérez Negrón, Julio César Díaz Mendoza, Juan Pablo Ucán Pech	Universidad Autónoma de Yucatán	
13:30 - 14:00	44	Model of Best Practice Representation for any Knowledge Area by Using Pre-Conceptual Schemas	Camilo Villota Ibarra, Carlos Mario Zapata Jaramillo, Alexander Barón Salazar, Héctor Hernandez Reinoza	Universidad Nacional de Colombia	

14:00 - 14:30	50	Towards the Use of a Framework to Make Technical Debt Visible	María de León-Sigg, Sodel Vázquez-Reyes, Daniel Rodríguez-Ávila	Universidad Autónoma de Zacatecas	
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SESSION F: SOFTWARE SYSTEMS CONSTRUCTION I (November 04, 2020)

	Paper ID.	Title	Authors	Institution	Chair
11:00 - 11:30	4	Covid-19 Care – a Mobile Application to Help Connect Volunteers and Vulnerable People in the Community during the Covid-19 Lockdown	Khoa Phung, Silas Odongo, Emmanuel Ogunshile	University of the West of England	Alan Ramírez
11:30 - 12:00	5	An Approach to Automatic Recognition of Web Advertising Focused on Different Languages	Donovan Riaño Enriquez, Rodrigo Piñon Ayala, Guillermo Molero-Castillo, Everardo Bárcenas	Engineering Faculty, Nacional Autonomous University of Mexico	
12:00 - 12:30	16	An Application Programming Interface for a Brain-Computer Interface Using Two Neurosky Mindwave DEVICES	Alan Ramírez-Noriega, Yobani Martínez-Ramírez, Samantha Jiménez, Elizabeth Gaxiola Carrillo, José Emilio Sánchez García	Universidad Autónoma de Sinaloa	

SESSION G: SOFTWARE SYSTEM CONSTRUCTION II (November 05, 2020)

	Paper ID.	Title	Authors	Institution	Chair
10:30 - 11:00	19	Desarrollo de un plugin para la visualización de analíticas del aprendizaje en estudiantes de la plataforma Moodle	Moisés Barbachano-Chiu, Víctor Menendez-Dominguez, Luis Curi-Quintal	Universidad Autónoma de Yucatán	César Guerra
11:00 - 11:30	21	Customized Diagnostic Tool for The Security Maturity Level of The Enterprise Information Based on ISO/IEC 27001	Josue A. Lopez-Leyva, Christopher A. Kanter-Ramirez, Jose P. Morales-Martinez	CETYS UNIVERSIDAD	
11:30 - 12:00	65	Desarrollo de nuevos comandos para Google Assistant utilizando Dialogflow, Firebase y NodeMCU (ESP8266) como intermediario	Noé HernándezGarcía, Ignacio López Martínez, Manuel Suárez Gutierrez	Instituto Tecnológico de Orizaba	

SESSION H: SOFTWARE TECHNOLOGY FOR LEARNING SYSTEMS (November 05, 2020)

	Paper ID.	Title	Authors	Institution	Chair
10:30 - 11:00	13	Quality of Service Evaluation of a Learning Management System using ISO/IEC 25011: A Prioritization Strategy	Jaime Medina, Abraham Davila	Pontificia Universidad Católica del Perú	Héctor Pérez
11:00 - 11:30	27	Literature Based Modeling Learning: An Imaginative Assignment to Learn Software Modeling	Hector G. Perez-Gonzalez, Alberto S. Nunez-Varela, Francisco E. Martinez-Perez, Sandra E. Nava-Muñoz, César Guerra-García and Reyes Juárez-Ramírez	Universidad Autonoma de San Luis Potosi	
11:30 - 12:00	53	Proposed Framework for Employing Cognitive Process for Resolving Programming Problems for Novice Programmers	Carlos Enríquez Ramírez, Raluy Herrero Mariza, Luz María Vega Sosa	Universidad Politecnica de Tulancingo	
12:00 - 12:30	46	A focus on codemixing and codeswitching in Tamil speech to text	Dheenesh Pubadi, Ayush Basandrai, Ahmed Mashat, Zvikomborero Chiurunga, Ishan Gandhi, William Ofei, Logesh Navaladi, Raj Ramachandran, Emmanuel Ogunshile	University of West of England	

SESSION I: ESTIMATION, TESTING AND FORMAL METHODS (November 06, 2020)

	Paper ID.	TÍTULO	AUTORES	Institution	Chair
10:30 - 11:00	23	An Algorithm for Implementing a Minimal Stream X-Machine Model to Test the Correctness of a System	Khoa Phung, Emmanuel Ogunshile	University of the West of England	Brenda Flores
11:00 - 11:30	43	Formal Verification of a Database Management System	Diego Medina-Martínez, Everardo Bárcenas, Guillermo Molero-Castillo, Alejandro Velázquez-Mena, Rocío Aldeco-Pérez	Universidad Nacional Autónoma de México	
11:30 - 12:00	57	Analysis of automated estimation models using machine learning	Jesús Iván Saavedra Martínez, Francisco Valdés Souto, Moisés Rodríguez Monje	Science Faculty, National Autonomous University of Mexico (UNAM)	

12:00 - 12:30	61	Metamodels and Category Theory in the Transformation of Semi-structured Data	Rosa-María Cantón-Croda, Damián-Emilio Gibaja-Romero	UPAEP-University	
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SESSION J: HCI AND INFORMATION VISUALIZATION I (November 05, 2020)

	Paper ID.	Title	Authors	Institution	Chair
10:30 - 11:00	11	Visualization to Support Decision-Making in Cities: Advances, Technology, Challenges, and Opportunities	M. Teresa Cepero García, Luis G. Montané-Jiménez	Universidad Veracruzana	Sodel Velázquez
11:00 - 11:30	15	METUIGA "Metodología para el diseño de sistemas basados en interfaces tangibles de usuario y técnicas de gamificación" Caso de estudio: Enseñanza de porciones matemáticas en niños ciegos	Luis Roberto Ramos Aguiar, Francisco Álvarez Rodríguez	Universidad Autónoma de Aguascalientes	
11:30 - 12:00	24	Hacia un sistema de software basado en HCI para el apoyo de niños con capacidades auditivas diferentes	Gerardo Cruz-González, Carlos Fernández-Y-Fernández, Jorge Aguilar-Cisneros	Universidad Tecnológica de la Mixteca	

SESSION K: HCI AND INFORMATION VISUALIZATION II (November 06, 2020)

	Paper ID.	Title	Authors	Institution	Chair
10:00 - 10:30	38	Sentiment Analysis in Jira Software Repositories	Andric Valdez, Hanna Oktaba, Helena Gómez, Aurora Vizcaíno	Universidad Nacional Autónoma de México	Carlos Fernández
10:30 - 11:00	45	A Metadata Application Profile to Structure a Scientific Database for Social Network Analysis (SNA)	Araceli López-Acosta, Alejandra García-Hernández, Sodel Vázquez-Reyes, Alejandro Mauricio-González	Autonomous University of Zacatecas	
11:00 - 11:30	56	Automatic Code Generation of User-Centered Serious Games: A Systematic Literature Review	Pedro Omar Silva-Vásquez, Viviana Yarel Rosales-Morales, Edgard Benítez-Guerrero	Universidad Veracruzana	
11:30 - 12:00	67	Extracting information objects from handwriting laboratory notes: an interaction design approach	Erick Franco Gaona, Maria Susana Avila-Garcia	Universidad de Guanajuato	

SESSION L: DATA MINING AND ARTIFICIAL INTELLIGENCE (November 06, 2020)

	Paper ID.	Title	Authors	Institution	Chair
10:00 - 10:30	63	Sistema de recomendación híbrido conversacional para restaurantes	Alejandro Ramírez Ramos, María Luisa Cervantes Piedras, Karina González Herrera, José Crispín Hernández, Edmundo Bonilla Huerta	Tecnológico Nacional de México Campus Apizaco	Andrés Mejía
10:30 - 11:00	25	Metodología para la generación de grafos de colaboración científica de una institución académica	Jared Guerrero-Sosa, Víctor Menéndez-Domínguez, Enriqueta Castellanos-Bolaños	Universidad Autónoma de Yucatán	
11:00 - 11:30	33	Towards the implementation of an Attention-based Neural Machine Translation with artificial pronunciation for Nahuatl as a mobile application	Sergio Khalil Bello García, Eduardo Sánchez Lucero, Blanca Estela Pedroza Méndez, José Crispín Hernández Hernández, Edmundo Bonilla Huerta, José Federico Ramírez Cruz	TecNM / Instituto Tecnológico de Apizaco	
11:30 - 12:00	35	Systematic Mapping Study on Techniques Used in Stages of a Data Mining Process Focused to Weather Data Analysis	Wilson Castillo-Rojas, César Hernández Hernández	Universidad de Atacama	