



PROGRAMA GENERAL - POR TRACK

TRACK: SISTEMAS INTELIGENTES

Track Chairs: Christoffer Löffler, Pablo Schwarzenberg, Martín Pedemonte

Lunes 27 - Sala S103 - Univ. Andrés Bello (*Quillota 980, Viña del Mar*)

Session Chair: Pablo Schwarzenberg

12:00 - 12:30 - Full Paper - "Giuliano Gonzalez, Nelson Ruiz, Diego Pinto-Roa, Diego Stalder and Max Pasten"-- "GRU-Based Prediction of Paraguay River Levels using Hydro-meteorological Co-variates and Periodic Retraining"

12:30 - 13:00 - Full Paper - "Mathias Aguilar, Héctor Velázquez, Diego Stalder, Andrés Wehrle, Jazmín Ojeda and Leonardo Santos"-- "Machine Learning Models for Water Level Prediction in Rapid Urban Streams: Case of Mburicaó, Asunción, Paraguay"

Session Chair: Martín Pedemonte

14:30 - 15:00 - Full Paper - Fabián Fallas-Moya and Nelson Méndez-Montero. "Optimización de Pseudoetiquetas para Detección de Objetos Semisupervisado usando un Método Mejorado de Supresión No-Máxima"

15:00 - 15:30 - Full Paper - Fabián Fallas-Moya, Danny Xie-Li and Saúl Calderón-Ramírez. "Squeeze Every Bit of Insight: Leveraging Few-shot Models with a Compact Support Set for Domain Transfer in Object Detection from Pineapple Fields"

15:30 - 16:00 - Full Paper - Javier Cordero-Quirós and Fabián Fallas-Moya. "Using Deep-Learning Models for Face-Detection to Provide Privacy Information for Identity Protection"

Session Chair: Pablo Schwarzenberg

16:30 - 17:00 - Full Paper - "Diego Balbuena, Matteo Martínez, Diego Stalder, Mathias Barrios, Lucas Pin, Alejandro Reckziegel, Christian Schaerer, Nilsa González, María Ferreira and Cinthya Rodríguez"-- "Towards Real-Time Mosquito Counting Using YOLO Models and Knowledge Distillation"

17:00 - 17:30 - Full Paper - Christian Rodríguez Soto and Allan Berrocal Rojas. "Self-supervised learning for animal species classification in long-tailed camera trap datasets"

17:30 - 18:00 - Full Paper - "Rodrigo Jr Garcia Hoyos, William Hoyos, Jose Aguilar and Jessica Polo"-- "Federated Learning for the Detection of Anomalies in Beef Cattle Fattening"

Martes 28 - Sala IBC 2-2 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)

Session Chair: Pablo Schwarzenberg

09:00 - 09:30 - Full Paper - "Luis Carlos Lara Lopez, Ignacio Trejos-Zelaya, Santiago Nunez-Corrales and José Helo-Guzmán"-- "Macroscopic Statistical Analysis & Specification Fidelity on ABM Simulations"

09:30 - 10:00 - Full Paper - "Eduardo S. Lopes, Hilário T. A. Oliveira and Kelly A.S. Gazolli"-- "Exploring T5-Based Code QA Systems to Support Teaching Programming in Portuguese and English"

10:00 - 10:15 - WIP - "Marco Aguirre, Carlos Ayala-Tipan, Angel Chunchu, Lorena Recalde, Gabriela Suntaxi, Diana Martinez-Mosquera and Luis Andrade"-- "Centinela Meets Agents: Agentic RAG for Academic Information in Ecuador"

Session Chair: Christoffer Löffler

11:00 - 11:30 - Full Paper - "Rodrigo Olivares, Pablo Olivares, Benjamín Serrano and Víctor Ríos"-- "Towards Real-Time Optimization: Generative Models as Adaptive Engines in Complex Systems"

11:30 - 11:45 - WIP - "Nicolás Escobar, Leonela Pereira, Libertad Tansini, Pedro Piñeyro and Carlos Testuri" A taxonomy of travel time prediction models

Session Chair: Christoffer Löffler

14:30 - 15:00 - Full Paper - "Mariano Luque, Ruben Saborido, Ana B. Ruiz, Sandra Gonzalez-Gallardo and Antonio Borrego" – Performance Assessment of Population-Based Multiobjective Optimization Algorithms Using Composite Indicators

15:00 - 15:30 - Full Paper - Sebastian Muñoz, Mauricio Moyano and Guillermo Cabrera "Robust Beam Angle Optimisation for IMRT Using Local Search Under Anatomical Uncertainty"

15:30 - 16:00 - Full Paper - "Rodrigo Olivares, Pablo Olivares Zuñiga, Benjamín Serrano and Víctor Daniel Ríos Tapia"-- "Bio-Inspired Algorithms for Distributed decision-Making in Intelligent Infrastructures"

Session Chair: Christoffer Löffler

16:30 - 17:00 - Full Paper - "Bernardo Palma, Laura Gatti and Rafael Sotelo" – "Making the Rounds: How Nurse Scheduling Science Improves Sales Supervision."

17:00 - 17:30 - Full Paper - "Rodrigo Gordienko, Miguelángel Díaz, Jimena Ferreira and Martín Pedemonte"-- "Shape-Constrained Hybrid Deep Learning–Genetic Programming Algorithm for Symbolic Regression"

17:30 - 17:45 - WIP - "Maximiliano Beltran, Sebastian Muñoz-Bustos, Nicole Ojeda-Ortega, Mauricio Moyano and Guillermo Cabrera-Guerrero"-- "A bi-objective approach to the composite retrieval problem using NSGA-II algorithm"

17:45 - 18:00 - WIP - Mauricio Moyano and Guillermo Cabrera-Guerrero "Pareto Local search heuristics to solve the multi-objective Direct aperture optimisation problem"

Miércoles 29 - Sala IBC 2-2 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)

Session Chair: Pablo Schwarzenberg

- 09:00 - 09:30 - Full Paper - "Alejandro David Velazquez Correa, Carlos Nahuel Villalba, Natasha Correa, Romina Rojas Moreno, Mauricio Machuca Cabral and Pastor Pérez-Estigarribia" -- "Detección de Fraudes en Billeteras Electrónicas: Estrategias de Optimización y Reducción de Falsos Negativos"
- 09:30 - 10:00 - Full Paper - "Rafael Dalacqua, Alexandre Yuji Kajihara and André Luis Schwerz"-- "Match Outcome Prediction in the Brazilian Basketball League using Machine Learning"
- 10:00 - 10:15 - WIP - "Ricardo Zorzal Davila, Filipe Wall Mutz, Jefferson Oliveira Andrade and Karin Komati"-- "Solar Flare Prediction Using Multivariate Time Series and Cost-Sensitive Machine Learning"
- 10:15 - 10:30 - WIP - Guillermo Trinidad, Miguel Langone and Gonzalo Tejera. "SUMBA: a Scalable, Unified, Modular, Behavior-driven Architecture for simple robotic grasping"
- 10:30 - 10:45 - WIP - "Juan Pablo Filevich and Hector Cancela" – "HyperLogLog for Probabilistic Estimation of Information Sets Cardinality in Large Finite Discrete imperfect-Information Games"

Session Chair: Pablo Schwarzenberg

- 11:00 - 11:30 - Full Paper - "Cristiano Souza de Oliveira, Rafael Toledo and Aldo von Wangenheim"-- "Local Path Planning for Self-driving Cars in Unknown Environments Using an Ensemble-Based Approach"
- 11:30 - 12:00 - Full Paper - "Cristian Millan-Arias, Ernesto Gutierrez and Francisco Cruz" – "Help me to Clean: Studying Multi-trainers on Interactive Reinforcement Learning in Domestic Scenarios"

Session Chair: Martín Pedemonte

- 14:30 - 15:00 - Full Paper - "Mauricius Santos, Henrique Mosquér and Alex S. Pinto" – "A systematic review of CNN approaches to assist diagnosis of asbestos-related disease using medical images"
- 15:00 - 15:30 - Full Paper - "Beatriz Lopes, Bibiana Q. T. da Silva, Aldo V. Wangenheim, Stephan Krug and Alex S. R. Pinto"-- "Advancing Automated Placental Screening: Deep Learning for Multiclass Segmentation in Postpartum Images"
- 15:30 - 16:00 - Full Paper - "Aaron Ponce Sandoval, Rodrigo Olivares, Wilfredo González and Roberto Muñoz"-- "Observational Variability in Neural Networks for the Classification of Oral Epithelial Dysplasia"

Session Chair: Martín Pedemonte

- 16:30 - 17:00 - Full Paper - "Rodrigo Bayuk, Joel Manquel, Luis Caro, Orietta Nicolis and Billy Peralta"-- "Explainable COVID-19 Classification via Variational Autoencoder-Guided Patch Occlusion"
- 17:00 - 17:30 - Full Paper - "Anne Carolinne Carvalho Galdino, Vinícius Ponte Machado, Juan Morysson Viana Marciano and Dorcas Lamounier Costa"-- "A Framework Proposal for Handling Missing Data Guided by Machine Learning: An Adaptive Threshold for Exclusion vs. Imputation in Clinical Datasets"

17:30 - 17:45 - WIP - "Gizeuda Crispim, Vitória Camelo, Hélio Siebra, Claurton Siebra and Guido Souza Filho"-- "A Comparative Evaluation of Survival Analysis Methods for Predicting Hospital Length of Stay"

17:45 - 18:00 - WIP - "Emilcy Juliana Hernández-Leal, Jader Daniel Atehortúa Zapata and Santiago Cano Duque"-- "Emotion Analysis Model using Image Processing and Transfer Learning"

Jueves 30 - Sala IBC 2-2 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)

Session Chair: Martín Pedemonte

09:00 - 09:30 - Full Paper - "Amanda Maduro, Carlos Rodriguez and Sebastian Ortiz Chamorro" – "VestiME: A RAG-based Multimodal Fashion Outfit Recommender System"

09:30 - 10:00 - Full Paper - "Jenis Arnold Alvarado Gonzales and Edwin Jonathan Escobedo Cárdenas"-- "Recommendation for Tabular Data Visualization Utilizing Machine Learning Applied to the Sales Domain"

10:00 - 10:30 - Full Paper - "Graziela S. Araujo, Luana Isabel Gonçalves de Lima, Roberta B. Oliveira and Guillermo Cámara-Chávez"-- "Spatio-Temporal Sign Recognition with Multiscale Vision Transformers and Multimodal Fusion"

Session Chair: Christoffer Löffler

11:00 - 11:30 - Full Paper - "Rubén Jiménez, Aldo Alfonso, Marcelo Báez, Santiago Ferreyra, Guilherme Melo, Luca Cernuzzi, Elena Casiraghi, Giorgio Valentini and Alberto Paccanaro"-- "An Empirical Study of Remote Homology Detection using Protein Language Models"

11:30 - 12:00 - Full Paper - "Humberto Farias, Katerina Goubanova, Daniel Ortiz and Tomas Caballero"-- "A Hierarchical SwinIR-Based Architecture for Multivariate Climate Downscaling with Emphasis on Extreme Events"

Session Chair: Christoffer Löffler

14:30 - 15:00 - Full Paper - "Ignacio Sica and Gustavo Vazquez" – "Exploring Centrality Measures and Encoding Variants for Graph Classification in Hyperdimensional Computing"

15:00 - 15:30 - Full Paper - "Carlos Quintero Gull, Jose Aguilar and Rodrigo Jr Garcia Hoyos" -- "A Feature Selection Method based on LAMDA algorithms for Classification and Clustering Tasks"

15:30 - 16:00 - Full Paper - "José Guerrero and Sebastian Grillo" – "Regression via Stacked Ensemble of Classification Models with Polynomial Meta-Learner"

TRACK: TECNOLOGÍAS EN INFORMÁTICA

Track Chairs: René Noël, Patricia Bazán

Lunes 27 - Auditorio Rojo - Univ. Andrés Bello (*Quillota 980, Viña del Mar*)

Session Chair: René Noël

- 12:00 Edgar Dulce-Villarreal, Julio Hurtado, Jose Garcia-Alonso, Enrique Moguel and Giovanni Albeiro Hernández Pantoja -- "A Mechanism for Universal Smart Contract: Advancing Blockchain Interoperability using Model-Driven Engineering"- Full Paper
- 12:30 Everton Knihs, Lucas Andrew Lopes, Santiago Ferrer Balcázar, Júlio César Martiniano Costa and Ismar Frango Silveira -- "Enhancing Security in Financial Transactions: A Geotemporal Filter-Based Approach for Fraud Prevention in Brazilian Bank Transfers"- WIP

Session Chair: Jose Garcia-Alonso

- 14:30 Janine Kniess - "Communication Protocol for Photovoltaic Systems and LPWAN Monitoring"- Full Paper
- 15:00 Dener Kraus, Adão Boava, Douglas D. J. de Macedo and Alex S. R. Pinto -- "Network Load Balancing Strategies for URLLC in 5G Edge AI Computing Inferences Using EdgeLB"- Full Paper
- 15:30 Juan Collio, Ana Aguilera and Irvin Dongo – "Efficient Method for Validating SPARQL Queries Using Semantic Web Ontologies"- Full Paper

Session Chair: William Giraldo

- 16:30 Michel Larrieur, Gerardo Riveros, Pedro Cespedes, Johana Villanueva and Diego Pedro Pinto Roa -- "A Multi-objective Evolutionary Approach for QoS and Energy Awareness in Software-Defined Networking"- Full Paper
- 17:00 Bruno Lartigau and Carlos Luna – "Formal specification of a consent model for personal data access control"- Full Paper

Martes 28 - Sala IBC 2-4 - Univ. Católica de Valparaíso (*Av. Brasil 2241, Valparaíso*)

Session Chair: Sergio Ochoa

- 16:30 Paul Rojas and John Sanabria – "Evaluating Kubernetes CNIs for IoT: A Case Study with Raspberry Pi Clusters and Distributed MariaDB with Galera" - Full Paper
- 17:00 Marco Javier Suárez Barón, Cristian Fandiño and Arturo Edmundo Junco -- "Análisis de Sentimientos en PQRS para la Identificación de Tendencias de Bienestar Social"- Full Paper
- 17:30 Dainier González Romero, Sergio Ochoa and Rodrigo Santos – "An Implementation of Software Defined Wireless Networks to Support IoT Applications"- WIP

Jueves 30 - Sala IBC 2-5 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)

Session Chair: René Noël

- 09:00 Federico Abdo, Patricio Carrau and Cristina Mayr – "RAM Freezer: A Portable System for Volatile Memory Acquisition in Computer Forensics Investigations"- Full Paper
- 09:30 Luis Freddy Muñoz Sanabria, Oscar Santiago López Erazo, Sebastián Muñoz Carvajal, Marlon Estiven Vargas Muñoz and Juan Sebastián Manquillo Lara -- "Systematic Mapping of Functional characterization of adaptability in post-quantum homomorphic cache schemes: A Extension"- Full Paper
- 10:00 Vitor Batista, Guilherme Koslovski, Mauricio Pillom, Charles Miers, Marco Marques and Marcos Simplicio Jr. -- "NFT under proof: performance analysis of NFT Minting using Hyperledger Caliper"- Full Paper

Session Chair: Ana Aguilera Faraco

- 11:00 Gabriel Zimmer Olegario, Adão Boava, Alex Sandro Roschildt Pinto and Douglas Dyllon Jeronimo De Macedo -- "QoS-Oriented Evaluation of FIFO, PQ, and WFQ in 5G Use Cases Using the ONOS SDN Controller"- Full Paper
- 11:30 Tiago Cardoso Ferreira, Thalia Santos de Santana, Ramayane Bonacin Braga and Adriano Honorato Braga -- "Virtual Reality as a Tool for Disseminating Educational, Scientific and Technological Environments"- WIP

Session Chair: Carlos Luna

- 14:30 Diego Pedro Pinto Roa, Francisco Garay, Oscar Giménez, José Colbes and Luis G. Moré -- "Semi-dynamic Routing, Spectrum, and Core Assignment for Elastic Optical Networks using Genetic Algorithms"- Full Paper
- 15:00 María Fernanda Molina, Gustavo Betarte and Carlos Luna – "A comparative study of implementations for validating consent in personal data access control" - Full Paper
- 15:30 Rodolfo Miranda de Barros, Vanessa Tavares de Oliveira - "A Performance and Capacity Monitoring Model based on ITIL 4: A case study applied in a City Hall" - Full Paper

Session Chair: Sergio Ochoa

- 16:30 Yair Rivera, Ángel D. Pinto Mangones, Nelson A. Pérez-García, Frank Ibarra Hernández, Juan Torres Tovio, Horderlin Robles Vega and Jorge Enrique De la Rosa Pareja -- "A Zero-Trust, AI-RMF-Governed Architecture for LLM-Enabled Telemedicine-as-a-Service: Mitigating Poisoning, Leakage and Unsafe-Output Threats"- Full Paper

TRACK: SISTEMAS EN LA PRÁCTICA

Track Chairs: Daniela Quiñones Otey, Diego Pinto

Lunes 27 - Sala S102 - Univ. Andrés Bello (*Quillota 980, Viña del Mar*)

Session 1: Sistemas de Gestión y Gobernanza

Session Chair: Diego Pinto

12:00 a 12:30 Suyana Arcos, Henry N. Roa and Santiago Alvaro - "Global implementation of IT governance and management frameworks: success cases, challenges, and key factors"

12:30 a 12:45 Ignacio Velásquez, Marcos Sepúlveda and José Joaquín Jara - "Towards the Application of Process Mining for Analyzing the Performance of Mining Processes" (**work in progress**)

12:45 a 13:00 Sebastian Yon, Jenny Espinoza and Carlos Alvarado - "Federated XGBoost-Powered Web Application for Safeguarding Personal Health Data in Hospitals and Clinics of Metropolitan Lima" (**work in progress**)

Session 2: Desarrollo y Arquitectura de Software

Session Chair: Diego Pinto

14:30 a 15:00 Rafael Palau Heikel, Magali Gonzalez and Luca Cernuzzi - "SIARE-Artefactos: automatizando la gestión de autorización de acceso a microservicios en sistemas de gestión pública"

15:00 a 15:30 Maria Luiza Fernandes and Paulo Sergio Lopes de Souza - "Parallel Implementation for Anomaly Detection in Methodologies Based on Consumption Profiles"

15:30 a 16:00 José Niuton Da Nova, Flávio De Barros Vidal and Aleteia Araujo - "An Experiment on Serialization of DIS Messages Using Protocol Buffers"

Session 3: Informática en Salud

Session Chair: Diego Pinto

16:30 a 17:00 Roxana Martínez, Carlos Bateca, Santiago Acha and Victoria Agnelli - "Towards a Scalable Open Data Platform in Public Health: Evolving the INCUCAI Case for Organ Donation"

17:00 a 17:30 Sara Arevalos, Cynthia Villalba, Francisco Pintos, Jessica Paniagua and Ever Garay - "Towards Interoperability: A patient oriented FHIR based Health Information Application Ecosystem"

17:30 a 18:00 João Castanho, Thelma Elita Colanzi, Felipe Fernandes, Raqueline Penteadó and Guilherme Guerino - "Georeferencing as Support in an Arbovirus Control System: Development and Validation"

Martes 28 - Sala IBC 2-4 - Univ. Católica de Valparaíso (*Av. Brasil 2241, Valparaíso*)

Session 4: Análisis y Aplicaciones de Datos

Session Chair: Diego Pinto

9:00 a 9:30 Francisco Cifuentes-Silva - "Identifying key roles in politics using Semantic Technologies"

9:30 a 10:00 David Ruete, Paolo Caviedes-Saavedra, Patricio Lagos-Gatica, Carla Taramasco, Hernán Astudillo and Jean Maidana - "Cloud-Based Customer Segmentation to Enhance Experience and Performance in Commercial Retail Spaces"

10:00 a 10:30 Ignacio Velásquez, Mario Gómez-Herrera and Marcos Sepúlveda - "A Systematic Literature Review of the Analysis of Costs and Other Dimensions in Process Mining and Related Disciplines" (**journal first**).

Session 5: Evaluación y Experiencia de Usuario

Session Chair: Daniela Quiñones Otey

11:00 a 11:30 João Castanho, Mariana Sato, Johnathan Barbosa, Gislaine Leal, Renato Balancieri, Aline Amaral, Guilherme Guerino and Thelma Elita Colanzi - "Heuristic Evaluation of a Web-Based System for Arbovirus Control in Brazil's Public Health Context"

11:30 a 11:45 Christopher Guzman Perez, Felipe Muñoz La Rivera and Mathias Proboste Martínez - "A comparative study of the performance of traditional and immersive drones in structural inspection tasks" (**work in progress**)

Session 6: Temas Específicos y Multidisciplinarios

Session Chair: Daniela Quiñones Otey

14:30 a 15:00 Maria de Los Milagros Verrengia, Julio Rolando Flores and Aldo Vecchietti - "Economic and environmental analysis using zero and low emissions trucks in the agri-food supply chain"

15:00 a 15:30 Dayana Palma Ramírez, Sebastián Cabrera, Diego Miranda, Cristian Cechinel, René Noel, Adrián Fernández Canino, Roberto Munoz and Carlos Escobedo - "The Influence of Gender and Nonverbal Communication on Collaboration in Agile Teams"

15:30 a 16:00 Santiago Andres Ponte Ahón, Juan Martín Seery, Lautaro Pereyra, Matilde Iannuzzi, Facundo Quiroga, Franco Ronchetti, Yael Aidelman, Waldo Hasperué, Roberto Gamen and Lydia Cidale - "PlateUNLP V2: Automating Spectral Extraction, Calibration, and Metadata from Digitized Glass Plate"

TRACK: EDUCACIÓN EN INFORMÁTICA

Track Chairs: Sandra Cano, Cristiano Maciel, Federico Meza

Lunes 27 - Auditorio Amarillo - Univ. Andrés Bello (*Quillota 980, Viña del Mar*)

Session Chair: César Collazos

12:00 - 12:30- Full Paper - Interactive Theorem Assistant for Learning Computational Logic in the style of "A Logical Approach to Discrete Math" - Federico Flaviani, Soraya Carrasquel and David Coronado

12:30 - 13:00- Full Paper - Students' Preferences and Behaviors Across Different Scenarios for Short Assessments - Isaac Alpizar-Chacon and Pedro Leiva-Chinchilla

Session Chair: César Collazos

- 14:30 - 15:00- Full Paper - Design methods for technological interventions to social skills improvement in children with Autism Spectrum Disorder (ASD): A Systematic Mapping Review - Arturo Hurtado, Edwin Garcés, César Collazos, Maria Amelia Eliseo and Gustavo Constain
- 15:00 - 15:30- Full Paper - Development of a pervasive game to promote social interactions in adolescents with Autism Spectrum Disorder during their activities of daily living - Gabriel Kury Fonseca, Cibelle Albuquerque de la Higuera Amat and Maria Amelia Eliseo
- 15:30 - 16:00- Full Paper - Guidelines for Gamification: Enhancing Learning in Software Engineering - Júlio Budiski Herculani, Aline Maria Malachini Miotto Amaral and Thelma Elita Colanzi

Session Chair: Sergio Ochoa

- 16:30 - 17:00- Full Paper - Enhancing Software Requirements Education Through Active Learning: A Pilot Study on Role-Playing and Real-World Simulations - Mauricio Hidalgo, Laura M. Castro, Hernán Astudillo, Fernando Montoya and Manuel Goyo
- 17:00 - 17:30- Full Paper - An exploratory study of the content of Sprint Retrospectives in Agile software capstone projects - Marcos Maldonado and Liubov Dombrovskaja
- 17:30 - 18:00- Full Paper - Framework to Support Students in Defining DevOps Technology Stacks - Gastón Márquez and Hernán Astudillo

Martes 28 - Sala IBC 2-5 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)**Session Chair: Federico Meza**

- 09:00 - 09:30- Full Paper - Cómo enseñar programación en tiempos de la inteligencia artificial generativa: qué nos dice la literatura, qué proponemos nosotros y qué opinan los alumnos - Clemente Rubio Manzano, Janza Meza, Rodolfo Fernandez Santibanez and Christian Vidal-Castro
- 09:30 - 10:00- Full Paper - Application of AIs to contribute to technological literacy in a futuristic instantiation of a methodology based on teaching-learning levels - Alberto Jose Lopez Pacheco and Eduard Gilberto Puerto Cuadros
- 10:00 - 10:30- Full Paper - A Reference Framework for the Use of Generative AI in Higher Education - Alexandra Gonzalez, Jesus Perez, Eduard Gilberto Puerto Cuadros, Wilmer Pereira and Jose Aguilar

Session Chair: Federico Meza

- 11:00 - 11:15- Work in Progress - Microlearning and Chatbots to Enhance Motivation and Performance in Engineering - Vicente Perelli, Liubov Dombrovskaja and Leonardo Madariaga
- 11:15 - 11:30- Work in Progress - Gaps in Student Perceptions when Considering a Future in Computer Science and Technology - Carla Paris, Valeria Herskovic and Katherine Vergara
- 11:30 - 12:00- Full Paper - Introducing Computing in Brazilian Basic Education: Insights from Teachers' Perspectives - Aline de Galés Silva, Mirella M. Moro, Maria Emilia Machado Telles Walter, Maristela Holanda, Renata Muniz Prado and Aleteia de Araujo

Session Chair: Federico Meza

- 14:30 - 15:00- Full Paper - Assessment of Arduino block-based programming environments for teaching and learning - Gonzalo Pablo Fernández and Christian G. Cossio-Mercado
- 15:00 - 15:15- Work in Progress - Transformación Educativa en Matemáticas Aplicadas con Google Colab: Experiencia en el Curso MAT281 - Francisco Alfaro, Valeska Canales and Dorian Villegas
- 15:15 - 15:30- Work in Progress - Design and Proof of Concept of an Adaptive MOOC for the Development of Algorithmic Thinking in Engineering Students - Valentina Aróstica, Dayana Carrillo, Andrea Vásquez and Federico Meza
- 15:30 - 16:00 **Invited Talk - International Collegiate Programming Contest in Latin America: 30 years - Carlos E. Ferreira and Federico Meza**

Miércoles 29 - Sala IBC 2-4 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)

Session Chair: Sandra Cano

- 09:00 - 09:30- Full Paper - Educating for the Future: A Framework for Integrating Digital Twins into Computer Science Curricula - Ismar Frango Silveira, João Soares de Oliveira Neto, Maria Amélia Eliseo, Valéria Farinazzo Martins, Alexandre Cardoso and Alexandre Gomes de Siqueira
- 09:30 - 10:00- Full Paper - Integration of Digital Twins in Multi-User Virtual Reality Environments for Technical Education in Engineering - Nicolas Norambuena, Felipe Muñoz-La Rivera, Alexis Toledo Borquez, José Luis Valín Rivera and Cristóbal Ignacio Galleguillos Ketterer
- 10:00 - 10:30- Full Paper - The Mediating and Moderating Roles of Mobile Device Use on the e-Learning Outcomes - Sean Eom and Nicholas Ashill

TRACK: SISTEMAS DE SOFTWARE

Track Chairs: Hernán Astudillo, Juan Felipe Calderón, Alicia Martínez Rebollar

Martes 28 - Sala IBC 2-1 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)

Software Systems Keynote - Moderator: Hernán Astudillo

09:30 - Andrés Díaz-Pace (UNICEN, Argentina) - "Artificial Intelligence and Software Architecture"

Session Chair: Hernán Astudillo

- 11:00 - Claudia Yamile Gómez Llanez, Paola Vallejo and Jose Aguilar - "ArSGam: A Modular Architecture for Integrating Gamification into Serious Games"
- 11:30 - João Victor Assis, Luiz Rodrigues, Valmir Macario, Guilherme Guerino and Marcelo Marinho - "Remote Team Management in Educational System Development: A Work-From-Home Experience on Developing an Unplugged Mathematics Tutoring Solution"

Session Chair: William Giraldo

- 14:30 - Sandra Casas, Graciela Vidal and Marcela Constanzo - "Relaciones Socio-Técnicas del Ecosistema de API web RAPID, estudio exploratorio"
- 15:00 - Fernando Muraca, Maria F. Pollo-Cattaneo and Hernán Astudillo - "Researchers want to Explain but Practitioners just want to Observe"
- 15:30 - Daniel Jara, Diego Williams and Gastón Márquez - "Defining a Modifiability Scenario for Quantum Software" (short paper).

Session Chair: Gastón Márquez

- 16:30 - Pablo Belzarena, Víctor González-Barbone and Claudina Rattaro - "PyWiSim: Python wireless simulation framework for multislice systems"
- 17:00 - Eduardo Mendizabal, Geraldo P. Rocha Filho, Marcelo A. Marotta, Marcos F. Caetano, João José C. Gondim, Lucas Bondan and Aleteia Araujo - "Self-Tuning DBMS: A Data-Driven Approach to Buffer Pool Optimization in Enterprise Systems"
- 17:30 - Adrian Fernández Canino, Italo Gabriel López, Diego Miranda, Dayana Palma Ramírez, Carlos Escobedo, Rene Noel, Cristian Cechinel and Roberto Munoz. "Automatic classification of interventions in agile meetings using multimodal NLP and interactive visualization" (short paper).

Miércoles 29 - Sala IBC 2-4 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)

Session Chair: Andrés Díaz-Pace

- 11:00 - Marcelo Alexandre da Cruz Ismael, Gabriel Costa Silva, Reginaldo Ré, Cesar A. Silva, Edson Tavares de Camargo, Guilherme Galante and Luis Carlos Erpen de Bona - "Goal Catalogue for Migrating Web Applications to the Cloud in Smart Cities: A KAOS-Based Approach"
- 11:30 - Luis Olsina, Pablo Becker and María Fernanda Papa - "An Ontological Conceptualization of Measurement and Evaluation Activities and Methods and their Applicability in Evaluation Strategies"

Miércoles 29 - Sala IBC 2-1 - Univ. Católica de Valparaíso (Av. Brasil 2241, Valparaíso)

Session Chair: Luis Olsina

- 14:30 - Carlos Lagos-Cortés, Gabriel Carmona and Roberto Asín-Achá - "Brodnik's Data Structure in Practice, Revisited"
- 15:00 - Federico Flaviani, Leonardo López, Ronald Becerra and Jorge Baralt-Torrijos - "CalcLogic: Functional Implementation of an Interactive Proof Assistant for Dijkstra-Scholten Computational Logic"
- 15:30 - Frederico R. Rosa, Felipe A. Louza and Humberto Luiz Razente - "Compact Data Structures for the Metric Suffix Array"

Session Chair: René Noël

- 16:30 - Wilamis Kleiton Nunes da Silva Silva, Rafael Batista Duarte, Bernan Nascimento and Emanuel Peixoto Vicente - "A Tertiary Study of Systematic Reviews on Machine Learning Techniques for Software Team Effort Estimation"
- 17:00 - Sebastián Francisco Gamboa Chacón, Josef Ruzicka González and Randy Cordero Barquer - "Cross-Platform Performance Assessment of PBRT-V3: A Statistical Study on Windows Server, Ubuntu, WSL, and Manjaro"