

Date: Monday, 01/Dec/2025	
08:00 - 08:30	D1-Reg: Registration
08:30 - 09:30	D1-WRS1: Workshop: Explainable AI (XAI) for Image Analysis with Deep Learning
09:30 - 10:00	D1-CB0: Coffee break
10:00 - 11:20	D1-WRS2: Workshop: Explainable AI (XAI) for Image Analysis with Deep Learning
11:20 - 11:40	D1-CB1: Coffee Break
11:40 - 13:20	D1-WRS3: Workshop: Multimodal Learning: Vision + Language
13:20 - 14:30	D1-LB: Lunch Break
14:30 - 15:50	D1-WRS4: Workshop: Multimodal Learning: Vision + Language
15:50 - 16:10	D1-CB2: Coffee Break
16:10 - 17:50	D1-WRS5: Workshop: Multimodal Learning: Vision + Language
Date: Tuesday, 02/Dec/2025	
08:00 - 08:30	D2-Well: Opening ceremony
08:30 - 09:50	D2-S1: Human-centered applications
	A Large Language Model Approach for In-Depth Qualitative Text Analysis Gabriel Astudillo (gastudillo@uc.cl) Enhancing data association in Multi-Object Tracking via learning-based Human Trajectory Prediction Alfredo Tomás Carreras Castro, Josué Manuel Rivera Velázquez, Jean-Bernard Hayet (jbhayet@cimat.mx) Event-based facial microexpression analysis using Spiking Neural Networks Nicolas Mastropasqua, Ignacio Bugueno-Cordova, Rodrigo Verschae, Daniel Acevedo, Pablo Negri, Maria Elena Buemi (mastropasquanicolas@gmail.com) Shifting the focus from demographics to trait variability to reveal latent bias in face recognition Bucchi, Ana; Lagos, Ruben (ana.bucchi@ufrontera.cl)
09:50 - 10:20	D2-Posters: Coffee break and Posters
	A Comparative Analysis of Language Model Embeddings from Genes and Proteins for involved in the Biological Carbon Pump Luis Valenzuela, Camila Reyes, Luis Martí, Nayat Sánchez-Pi (luis.valenzuela@inria.cl) Benchmarking Multimodal Radiomic Classifiers for Glioma Grading Using MRI and Machine Learning Pamela Franco, Cristian Montalba, Raul Caulier-Cisterna, Ignacio Espinoza, Francisco Torres, Carlos Bennet, Steren Chabert, Rodrigo Salas (pamela.franco@unab.cl)

	Classification of Electrical Appliances using Deep Convolutional Subspace Clustering Skander Chouchene, Manar Amayri, Nizar Bouguila (nizar.bouguila@concordia.ca)
	Machine Learning Models for Predicting Suicidal Ideation in University Students Fernanda Rubio (fernanda.rubio@sansano.usm.cl)
	Machine Learning-Based Assessment of White Matter Biomarkers of Verbal Episodic Memory Impairment in Multiple Sclerosis Using Diffusion-Weighted Imaging Cristian Montalba, Pamela Franco, Raul Caulier-Cisterna, Tomas Labbe, Ethel Ciampi, Claudia Carcamo, Juan Pablo Cruz, Marcelo E Andia (cmontalbaz.uc@gmail.com)
	Multimodal Artificial Intelligence Model for Quadrant Detection in Mammograms Francisco Javier Mario Navarro Muñoz, Rodrigo Salas Fuentes, Eduardo Godoy Llanca (ffnavarro@gmail.com)
	Spanish-Mapudungun Translation using Transfer Learning for Low-resource languages Hernan Lira, Luis Marti, Nayat Sanchez-Pi (hernan.lira@inria.cl)
	Speeding up KNN-WH for Origin-Destination Travel Time Estimation Sofía Alvarez, Sebastian Moreno, Alfonso Tobar-Arancibia, Wilfredo Yushimito (sebastian.moreno@uai.cl)
10:20 - 11:20	D2-OS1: Joao Papa: Perspectives on Quantum-based Learning Approaches in Graphs
11:20 - 11:40	D2-CB1: Coffee Break
11:40 - 13:20	D2-S2: Medical imaging
	CAMAlzyer: A 3DSlicer extension for AI segmentation and generation of proximal femur 3D models Benjamin A. Rodriguez, Alejandro A. Espinoza, Shane Nho, Miguel Carrasco, Juan F. Vivanco (benjamirodriguez@alumnos.uai.cl)
	DeepProstate: Integrated Deep Learning and Interactive Visualization for Clinically Significant Prostate Cancer Segmentation Ronald Marca, Rodrigo Salas, Sebastian Ponce, Paola Caprile, Cecilia Besa (rnldmarca@gmail.com)
	Explainable Machine Learning for Hypoxia Classification Using Finite Difference Oxygen Maps in Simulated Vascular Networks Pamela Franco, Cristian Montalba, Raul Caulier-Cisterna, Jorge Vergara, Ignacio Espinoza (pamela.franco@unab.cl)
	Multi-instance learning with missing modalities for multi-modal retinal image grading Sébastien Richard, Marie Beurton-Aimar, Cécile Delcourt, Marie-Noëlle Delyfer (sebastien.richard@labri.fr)
	Unsupervised Dual-Task W-Net for Intracranial Hemorrhage Detection and Segmentation in Non-Contrast CT Felipe Estay, Constanza Rodriguez, Javier Mora, Rodrigo Salas, Steren Chabert, David Ortiz. (felipe.estay@estudiantes.uv.cl)
13:20 - 14:30	D2-LB: Lunch Break
14:30 - 15:50	D2-OS2: Ioannis Pitas: Drone Vision and Big data analytics for Natural Disaster Management
15:50 - 16:10	D2-AIDA: International AI Doctoral Academy (A-105)
15:50 - 16:10	D2-CB2: Coffee Break
16:10 - 17:50	D2-S3: ML for Clinical Medicine

	Machine Learning for Compositional Microbiome Data to Predict a Clinical Outcome: Are Interpretable Methods Up to the Task? Céline Hosteins, Marta Avalos, Diego Kauer, Cristian Meza, Laurence Delhaes, Raphaël Enaud (marta.avalos-fernandez@inria.fr)
	Machine Learning Models for Predicting Surgical Case Times in Breast Cancer Procedures Josefa E. Bravo-Parra; Jorge A. Acuna; Sebastián Moreno; Nicolás Villablanca (josefbravo@alumnos.uai.cl)
	Pain Detection Using Deep Networks and Visual Transformers Marcos Augusto de Souza Pinto, Felipe Rocha Spitale, Fabio Arthur Soares Araujo, Cicero Ferreira Fernandes Costa Filho, Marly Guimaraes Fernandes Costa (ccosta@ufam.edu.br)
	Patterns Beyond Labels: Clustering Allergy Diagnoses in Overlapping Clinical Profiles Maja Szczypka, Paulina Tworek, Julia Kahan, Marek Mikołajczyk, Roman Lewandowski, Jose Sousa (p.tworek@sanoscience.org)
	Utilizing Anatomical Magnetic Resonance Images and Hierarchical Multi-Layer Perceptrons for Early Detection of Dyslexia Yookta Pandit (yookta.pandit@gmail.com)
18:00 - 19:00	D2-WD: Welcome drinks
Date: Wednesday, 03/Dec/2025	
08:00 - 08:30	D3-Reg: Registration
08:30 - 09:50	D3-S1: Neural Network Models
	Adaptive Tuning of a Proportional Integral Controller Using a Transformer Network Ignacio Carvajal Catalan, Andres Peters Rivas (andres.peters@uai.cl)
	DeepSignBridge: A Real-Time Translation System for Peruvian Sign Language Based on Transformers and Hybrid Computer Vision Models Gerardo Vilcamiza (gerardo.vilcamiza@ieee.org)
	Intrusion Pattern Recognition in DAS Using Multi-Domain Features and a Transformer Network Michel Dione, Jerry Lonlac, Stephane Lecoeuche, Anthony Fleury (michel.dione@imt-nord-europe.fr)
	Physics-Informed Neural Networks for Coupled Fluid Dynamics and Nutrient Transport: A Comparative Study of Causal Training Methods Emir Chacra, Paul Escapil-Inchauspé, Luis Martí, Nayat Sanchez-Pi (paulescapil@gmail.com)
09:50 - 10:20	D3-Posters: Coffee break and Posters
10:20 - 11:20	D3-OS1: Narayan Srivinas: Opportunities, Challenges, and Threats Using Synthetic Data for AI
11:20 - 11:40	D3-CB1: Coffee Break
11:40 - 13:20	D3-S2: Large Language Models
	A practical Pipeline for Guarani-Jopara LLMs: Corpus, Instruction Tuning, Human-Evaluation and Findings Margarita Ruiz Olazar, Ruben Diaz, Diego Diaz, Diego Ihara, Marvin Aguero-Torales (margarita.ruiz@ucom.edu.py)
	AU-TextAlign: A Pipeline for Word-Level Facial Expression Tagging in LLMs Jose Guillen, Valentin Barriere, Mauricio Araya (joseguillen20015@gmail.com)

	Embedding Confidence to Enhance Trust in AI Document Entity Extraction Matthew MacDonald, Sina Khosravi, Arash Ramin, Sina Meraji (matt.macdonald@applyboard.com) Using Chat-GPT for coding properties in semantic memory studies Diego Ramos A. Sebastian Moreno Enrique Canessa Sergio Chaigneau (diegor98@gmail.com) X-Flow: Explanation-Augmented prompting for LLM-Based Intrusion Detection Iván Pizarro, Ricardo Nanculef, Carlos Valle (ivan.pizarro@usm.cl)
13:20 - 14:30	D3-LB: Lunch Break
14:30 - 15:50	D3-OS2: Monique Thonnat: Behavior recognition by video analysis and applications to cognitive disorders diagnosis
15:50 - 16:10	D3-CB2: Coffee Break
16:10 - 17:50	D3-S3: Machine Learning Models
	A Novel Information-Driven Strategy for Optimal Regression Assessment Benjamín Castro, Camilo Ramírez, Sebastián Espinosa, Jorge Silva, Marcos Orchard, Heraldo Rozas (benjamincaastro@ug.uchile.cl) An Event Based Shapelet Extraction for Time Series Classification Marcelino Ulica Abel, Mariane Regina Sponchiado Cassenote, Felipe Duarte Silva, Guilherme Eduardo Gonçalves da Silva, Fabiano Silva (muabel@inf.ufpr.br) Brauer analysis for the color quality control of tone textile Danna Odette Moreno Mendez, Ricardo Hugo Arteaga Bastidas, Andres Felipe Hernandez Jurado, Julio César Velásquez Londoño (dmorenome@unal.edu.co) KAN versus MLP on Irregular or Noisy Functions Chen Zeng, Jiahui Wang, Haoran Shen, Qiao Wang (chenzeng@seu.edu.cn) Semi-Dynamic Ensemble for Evolutionary NAS in Continual Learning Daniel Víctor Ferreira, Lucas Rakotoarivony, Agathe Archet (agathe.archet@thalesgroup.com)
18:00 - 19:00	D3-ACHIRP: ACHIRP meeting
20:00 - 22:00	D3-Dinner: Dinner at Norag
Date: Thursday, 04/Dec/2025	
08:00 - 08:30	D4-Reg: Registration
08:30 - 09:50	D4-S1: ML for Earth and Space
	Earthquake Classification with Deep Learning Across Different Subduction Zones: Chile, Japan, and Mexico Chinomso Johnson-Okoro, Carlos Hernandez, Billy Peralta, Orietta Nicolis, <u>Matias Greco</u> (matiasjgreco@gmail.com) Explainable AI for Binary Black Hole Light Curve Classification: A Feature-Weighted Embedding Approach Vicente Echegaray, Jorge Cuadra (viechegaray@alumnos.uai.cl) mAP-C: A Coverage-Based Metric for Robust Cross-Instrument Sunspot Detection Using YOLOv8 Martinez Ignacio, Astudillo Cesar, Tenreiro Claudio, Velastin Sergio (iamartinezh98@gmail.com) Seasonal time-series prediction of pathlength variability at ALMA Priscilla Nowajewski-Barra, Ximena Cubillos, Flor Candia (priscilla.nowajewski@alma.cl)

09:50 - 10:20	D4-Posters: Coffee break and Posters
10:20 - 11:20	D4-OS1: Marcelo Mendoza: Artificial Reasoning and ChatGPT, Toward a general AI system by combining NLP with the ability to simulate human-like reasoning
11:20 - 11:40	D4-CB1: Coffee Break
11:40 - 13:20	D4-S2: ML for Ecology and Biology
	An Integrated Deep Learning Pipeline for Multi-Object Tracking and Interaction Analysis of Cetaceans in UAV Imagery Reinan Lopes Argolo, Paulo Eduardo Ambrosio, Bianca Machado Righi, <u>Susana Marrero Iglesias</u> (smiglesias@uesc.br) Ensemble clustering in active learning: application to grape detection Leon Kantikov, <u>Hubert Cecotti</u> (hcecotti@csufresno.edu) Preliminary Results of Deep Learning Classification of Baleen Whale Maximilano Vega, Susannah Buchan, Gonzalo Farias (Maximiliano.vega.c@mail.pucv.cl) Synthetic Data Generation for Morphophysiological Trait-Based Classification of in vitro growth of <i>Cattleya walkeriana</i> Using Deep Learning Pablo Ormeño-Arriagada, Michele Carla Nadal, Jose Henrique Nunes Flores, Moacir Pasqual (pablo.ormeno@uvm.cl) Unsupervised Domain Adaptation using Synthetic Images from a Game Engine for Grape Detection Albert Furtado, Midhun Puthiyelath, <u>Hubert Cecotti</u> (hcecotti@csufresno.edu)
13:20 - 14:30	D4-LB: Lunch Break
14:30 - 15:50	D4-S3: Datasets and Energy ML applications
	Energy Disaggregation Using Radial Basis Function Neural Networks based on Deep Co Training Architecture <u>Mohammad Kaosain Akbar</u>, Manar Amayri, Nizar Bouguila (mo_kbar@live.concordia.ca) Learning to Optimally Dispatch Power: Performance on a Nation-Wide Real-World Dataset Ignacio Boero, Santiago Diaz, Tomas Vazquez, Enzo Coppes, Pablo Belzarena, <u>Federico Larroca</u> (flarroca@fing.edu.uy) MagTapeDB: A Dataset of Historical Magnetic Tape Recordings Ignacio Irigaray, Diego Silvera, Emilio Martinez, Luiz Wagner (irigaray@fing.edu.uy) UruDendro4: A Benchmark Dataset for Automatic Tree-Ring Detection in Cross-Section Images of <i>Pinus taeda</i> L. <u>Henry Marichal</u>, Joaquin Blanco, Diego Passarella, Gregory Randall (hmarichal93@gmail.com)
15:50 - 16:10	D4-CB2: Coffee Break
16:10 - 17:50	D4-S4: ML Across Scientific Domains
	Analysis of DNA Damage Patterns Using Atomic Force Microscopy Rebeca Vitoria Calmon da Conceicao, Matheus da Silva Queiroz, Miqueias Amorim Santos Silva, Fermin de la Caridad Garcia Velasco, Paulo Eduardo Ambrosio, <u>Susana Marrero Iglesias</u>, (smiglesias@uesc.br) Comparative Study of Complex Network Centrality Measures for EEG Channel Selection in Music Genre Classification

	Andrés Eduardo Coca Salazar (andressalazar@utfpr.edu.br) EEG channel selection via h-index-based centrality measures of complex networks for music genre classification Andrés Eduardo Coca Salazar (andressalazar@utfpr.edu.br) Enhancement of 3D Gaussian Splatting using Raw Mesh for Photorealistic Recreation of Architectures Ruizhe Wang, Chunliang Hua, Tomakayev Shingys, Mengyuan Niu, Qingxin Yang, Lizhong Gao, Yi Zheng, Junyan Yang, Qiao Wang (rz_wang@seu.edu.cn) High-Precision Mapping of Mountain Terrain for Human Locomotion Research: A Multimodal Geospatial Framework Raimundo Sanchez, Claudio Nieto-Jimenez, Cristian Riveros-Matthey (raimundosanchezu@gmail.com)
18:00 - 18:30	D4-END: Final ceremony, best paper awards