

RECPAD 2019

25th Portuguese Conference on Pattern Recognition

31 October

- 08h30 Registration
- 09h00 Opening Ceremony
- 09h15 Poster Session I
- 10h15 Coffee Break
- 10h45 Keynote Talk – Carmen Poon
- 11h30 APRP 30th Anniversary
- 12h00 Lunch Break
- 13h30 Visit to the Botanical Garden / House Anderson
- 14h45 Oral Session
- 15h45 Demo Session + Poster Session II
- 16h45 Coffee Break + APRP Meeting
- 17h15 Poster Session III
- 18h00 Awards and Closing session

Program:

Organizers:



Sponsors:





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09h15 10h15	Poster Session I	Image Segmentation and Classification of Tissues and Diseases
P101	(7) Biceps Brachii Tissue Atrophy Detection Using AlexNet	Guilherme Franco, Jose Silvestre Silva , Alexandra Andre and Jaime B. Santos
P102	(59) Segmentation of US fetus images through Dijkstra's inspired algorithm	Lio Gonçalves , Paulo Salgado and Paulo Afonso
P103	(2) Left Ventricular Segmentation in 2D Echocardiography: Specialization vs. Generalization in a U-Net Architecture	Martim Chaves , João Pedrosa and Aurélio Campilho
P104	(56) U-Net based approaches for ovarian structures segmentation in ultrasound images	Sónia Marques , Catarina Carvalho, Carla Peixoto, Duarte Pignatelli, Jorge Beires, Jorge Silva and Aurélio Campilho
P105	(28) Anatomy Segmentation of Breast Ultrasound images	António M. Carreiro , João F. Teixeira and Hélder P. Oliveira
P106	(11) Conditional Cycle GANs for Data Augmentation in Mammography	Eduardo Castro , José Costa Pereira and Jaime S. Cardoso
P107	(54) 3D breast models: matching MRI and Surface Scan Data	Sílvia Bessa , Pedro H. Carvalho and Hélder P. Oliveira
P108	(23) Interpretable Ensemble Model for the Aesthetic Evaluation of Breast Cancer Treatments	Wilson Silva , Kelwin Fernandes, Maria J. Cardoso and Jaime S. Cardoso
P109	(24) Automatic Segmentation of Invasive Breast Cancer on Whole-Slide Images	Sara P. Oliveira and Hélder P. Oliveira
P110	(49) Morphological classification of red blood cells using computer vision techniques	José Bastos , Priscila Silva, Ana Tomé and Miguel Oliveira
P111	(57) Classification of White Blood Cells Using Image Processing Techniques – Preliminary Results	Verónica Vasconcelos , Luis Marques and Fernando Lopes
P112	(21) Increasing topological consistency in blood vessel segmentation	Ricardo Araújo , Jaime Cardoso and Hélder Oliveira
P113	(15) UOLO: a framework for object detection and segmentation in medical images	Teresa Araújo , Guilherme Aresta, Adrian Galdran, Pedro Costa, Ana Maria Mendonça and Aurélio Campilho
P114	(13) Aiming for automatic lung cancer screening in low dose computed tomography	Guilherme Aresta , Teresa Araújo, Colin Jacobs, Bram van Ginneken, António Cunha, Isabel Ramos and Aurélio Campilho
P115	(33) Convolutional Neural Network Architectures for Texture Classification of Pulmonary Nodules	Carlos Ferreira , António Cunha, Ana Mendonça and Aurélio Campilho
P116	(5) Classifying very small multi-modal data: application oesophagic early-stage cancers	Jorge Filipe Santos Ferreira , Inês Domingues and João Santos
P117	(34) Multiclass Lesions Classification in Colonic Images	Maria Teresa Valério, Sara Gomes, Marta Salgado, Hélder P. Oliveira and António Cunha
P118	(55) Benchmarking of deep learning strategies for use in a skin cancer screening system	José Reisinho , Francesco Renna, Miguel Coimbra and Francisco Vicente
P119	(36) Feature Extraction using Poincaré Plots for Gait Classification	Luis Marques, Flora Ferreira , Aldina Correia, Estela Bicho and Wolfram Erlhagen
P120	(17) Fine Segmentation of Head and Torso Using Label Refinement Networks	João Ribeiro Pinto and Jaime S. Cardoso

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14h45 15h45	Oral Session	
O1	(26) Producing Decisions and Explanations: A Joint Approach Towards Explainable CNNs	Isabel Rio-Torto , Luís Teixeira and Kelwin Fernandes
O2	(44) Image Sentiment Analysis: Experimental Evaluation of Several Deep Learning Architectures	António Gaspar and Luís A. Alexandre
O3	(38) Evaluation of Statistical Complexity in Viral Genome Sequences.	Jorge Miguel Silva , Diogo Pratas and Sérgio Matos
O4	(12) Optic Disc and Fovea Detection in Fundus Images: A Contribution to the IDRiD Grand Challenge	Ana Maria Mendonça, Tânia Melo , Teresa Araújo and Aurélio Campilho
O5	(42) Detection and Segmentation of Pulmonary Lesions using Deep Learning	João B. Sá Carvalho and Mário A. T. Figueiredo
15h45 16h45	Demo Session	
D1	(1) LNDetector: a flexible gaze characterisation collaborative platform for pulmonary nodule screening	João Pedrosa , Guilherme Aresta, João Rebelo, Eduardo Negrão, Isabel Ramos, António Cunha and Aurélio Campilho
D2	(47) Towards a Deep Keypoint Detection Algorithm for the Aesthetic Assessment of Breast Cancer Surgery Outcomes	Tiago Gonçalves , Wilson Silva and Jaime S. Cardoso
D3	(51) Phase plane analysis for lower limb joint angular movement pattern recognition on modified gait	Carlos Rodrigues , Miguel Correia, João Abrantes, Jurandir Nadal and Marco Aurélio Benedetti Rodrigues
D4	(16) From Mockup to User Interface	Nuno Calejo , Hugo Veiga and Mário Figueiredo

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15h45 16h45	Poster Session II	Computer Vision and Statistical Methods
P201	(8) User experience tests over a Mixed Reality interface of a SAR system with UAVs	Raul Homero Llasag Rosero , Carlos Fernando Grilo and Catarina Helena Silva
P202	(9) Extracting Rules for process optimization: a case study	Manuel Xarez , Peter Weiderer, Ana Maria Tomé and Elmar W. Lang
P203	(10) Machine Learning for Intrusion Detection	André Brandão and Petia Georgieva
P204	(22) Studying the behavior of a simulated Emergency Medical System using active learning	Francisco Antunes , Francisco Pereira and Bernardete Ribeiro
P205	(30) Neural-based snippet extraction for biomedical question answering	Tiago Almeida and Sérgio Matos
P206	(32) A generative model for networked data streams	Diogo Pernes and Jaime Cardoso
P207	(39) A grey-box Neural Network Composite Model for an Industrial Heating Furnace	Daniel Santos, Sérgio Costa, Luís Rato , Teresa Goncalves, Isabel Malico, Paulo Canhoto, Frederico Alvarez and Miguel Barão
P208	(43) Evaluation of Deep Learning Architectures on Multitrait Author Profiling	Roy Khristopher Bayot and Teresa Goncalves
P209	(40) Using PCL Global Descriptors in a DenseFusion Architecture	Nuno Pereira and Luís Alexandre
P210	(41) Impact of Interference on Time-Of-Flight LiDAR	Pedro Martins , António Neves, Miguel Drummond and André Albuquerque
P211	(27) Applying Digital Colourimetry for Estimation of Sulfonamides Concentration in Water	Pedro H. Carvalho , Sílvia Bessa, Ana Rosa M. Silva, Patrícia S. Peixoto, Marcela A. Segundo and Hélder P. Oliveira
P212	(46) Selection of the number of states in hidden semi-Markov models	Filipa Rente , Zita Marinho and Mário Figueiredo
P213	(26) Producing Decisions and Explanations: A Joint Approach Towards Explainable CNNs	Isabel Rio-Torto , Luís Teixeira and Kelwin Fernandes
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17h15 18h	Poster Session III	Biometrics and Signal Processing
P301	(3) Deep Recurrent Networks for Molecular Drug Design	Maryam Abbasi , Bernardete Ribeiro and Joel P. Arrais
P302	(52) Clustering DNA sequences by relative compression	Morteza Hosseini, Diogo Pratas and Armando J. Pinho
P303	(37) Mutation status prediction of lung-cancer related genes	Catarina Dias, Gil Pinheiro, Tania Pereira , António Cunha and Hélder Oliveira
P304	(4) Separation of the Aortic and Pulmonary Components of the Second Heart Sound Using Gaussian Mixture Models	Francesco Renna and Miguel Coimbra
P305	(14) Measuring the reliability of a HSMM heart sound segmentation algorithm	Jorge Oliveira , Francesco Renna, Theofrastos Mantadelis, Pedro Gomes and Miguel Coimbra
P306	(20) Evaluation of Lead I ECG Features Discriminant Power for Cardiac Diseases Identification	Renato Pereira , Pedro Rodrigues and Bruno Bispo
P307	(18) Long-Term Performance of a Convolutional Neural Network for ECG-Based Biometrics	Gabriel Lopes, João Ribeiro Pinto , Jaime S. Cardoso and Ana Rebelo
P308	(29) Stream-based middleware platform for drowsiness detection	Pedro Costa , André Lourenço, Arnaldo Abrantes, Pedro Jorge and Pedro Gamito
P309	(25) Face Anti Spoofing: Handcrafted and Learned Features for Face Liveness Detection	Paulo Costa, Pedro Silva, João Ribeiro Pinto, Ana F. Sequeira and Ana Rebelo
P310	(58) Deep Learning Approaches for Sentiment Analysis in Instagram Images	Joana Costa , Catarina Silva, Sebastián Utreras and Tomas Welling
P311	(31) Describing People: an initial concept	Daniel Turner and João M.F. Rodrigues
P312	(35) Indoor Walls Detection, Tracking and Superimposition	Ricardo J.M. Veiga and João M.F. Rodrigues
P313	(50) Automated pattern recognition of cerebral amyloid angiopathy patients	Fátima Solange Silva and Rui Lebre