

EPIA-2019 Program Overview

	Tuesday September 3			Wednesday September 4			Thursday September 5			Friday September 6		
08:00	registration			registration			registration			registration		
09:00	DSAI/BAAI Student Sessions			IROBOT	SSM/AIL	AloTA-1	KRR	KDBI-2	AITs-1	AITs-2	AIPES-1	AloTA-2
09:30				coffee-break			coffee-break			coffee-break		
10:00				Keynote- Marco Dorigo			Keynote- Michael Wooldridge			Keynote- Albert Bifet		
10:30				lunch			lunch			lunch		
11:00				lunch			lunch			lunch		
11:30	lunch			lunch			lunch					
12:00	lunch			lunch			lunch					
12:30	lunch			lunch			lunch					
14:00	BAAI	GAI-1	TeMA-1	KDBI-1	GAI-2	MASTA	APPIA Meeting			Societal AI Pannel		
14:30	coffee-break			coffee-break			Conference Visit			AI4GAMES Session 4.2.2 AIPES-Dominoes AIOTA-3/AICPDES		
15:00										TeMA-2		
15:30	coffee-break			coffee-break						coffee-break		
16:00	coffee-break			coffee-break						coffee-break		
16:30	coffee-break			coffee-break						coffee-break		
17:00	coffee-break			coffee-break			coffee-break					
17:30	coffee-break			coffee-break			coffee-break					
18:00	coffee-break			coffee-break			coffee-break					
18:30	coffee-break			coffee-break			coffee-break					
19:00	coffee-break			coffee-break			coffee-break					
19:30	Opening Session/Welcome Reception											
20:00							Conference Dinner					

EPIA-2019 Detailed Program

Tuesday, September 3

BAAI - Business Applications of Artificial Intelligence

Room: Auditório 1 Chair: Célia Talma

- 14:00 A Recommender System for Telecommunication Operators' Campaigns
Diogo Alves, Bruno Valente, Ricardo Filipe, Maria Castro and Luís Macedo
- 14:20 Improving the AHT in Telecommunication Companies by Automatic Modeling of Call Center Service
Henrique Neto, Rita Júlia, Elaine Paiva, André De Carvalho, Anísio Júnior, Diansley Peres, Etienne Júlia, Jony de Melo, Umberto Barcelos and Josiane de Assis
- 14:40 Comparing Machine Learning and Statistical Process Control for Predicting Manufacturing Performance
Sibusiso Khoza and Jacomine Grobler
- 15:00 Feature-based Time Series Classification for Service Request Opening Prediction in the Telecom Industry
Fabiola S. F. Pereira, André C. P. L. F. De Carvalho, Rafael Assis, Maxley Soares, Elaine R. Faria, Rita Júlia, Umberto Barcelos and Jony Melo
- 15:20 A Diversity Based Multi-objective Hyper-heuristic for the FJSP with Sequence-Dependent Set-Up Times, Auxiliary Resources and Machine Down Time
Jacomine Grobler
- 15:40 Sequence and Network Mining of Touristic Routes based on Flickr Geotagged Photos
Ana Silva, Pedro Campos and Carlos Ferreira

GAI-1 - General Artificial Intelligence

Room: Auditório 2 Chair: Paulo Novais

- 14:00 Determining emotional profile based on microblogging analysis
Ricardo Martins, Pedro Henriques and Paulo Novais
- 14:20 MNAR Imputation with Distributed Healthcare Data
Ricardo Cardoso Pereira, Miriam Seoane Santos, Pedro Pereira Rodrigues and Pedro Henriques Abreu
- 14:40 A Divide and Conquer Approach to Automatic Music Transcription using Neural Networks
André Gil, Carlos Grilo, Gustavo Reis and Patrício Domingues
- 15:00 Simple LSTM: A Deep-Learning Approach to Simple-Claims Classification
Piyush Chawla, Diego Esteves, Karthik Pujar and Jens Lehmann
- 15:20 Analysing the Footprint of Classifiers in Adversarial Denial of Service Contexts
Nuno Martins, José Cruz, Tiago Cruz and Pedro Abreu
- 15:40 The Regression Tsetlin Machine: A Tsetlin Machine for Continuous Output Problems
Kuruge D. Abeyrathna, Ole-Christoffer Granmo, Lei Jiao and Morten Goodwin

TEMA-1 - Text Mining and Applications

Room: Aula Magna Chair: Joaquim Silva

- 14:00 Exploring textual features for multi-label classification of Portuguese film synopses
Giuseppe Portolese, Valeria Feltrim and Marcos A. Domingues
- 14:20 Using Recurrent Neural Networks for Semantic Role Labeling in Portuguese
Daniel H. M. Falci, Marco A. C. Soares, Wladimir C. Brandão and Fernando S. Parreiras
- 14:40 Evaluating Active Learning Sampling Strategies for Opinion Mining in Brazilian Politics Corpora
Douglas Vitorio, Ellen Souza and Adriano L. I. Oliveira
- 15:00 Exploring Multi-label Stacking in Natural Language Processing
Rodrigo M. Nunes, Valéria D. Feltrim and Marcos A. Domingues
- 15:20 Exploring Emojis for Emotion Recognition in Portuguese texts
Luís Duarte, Hugo Oliveira and Luis Macedo
- 15:40 Improving the Classification of Q&A Content for Android Fragmentation using Named Entity Recognition
Adriano Rocha and Marcelo Maia

TEMA-2 - Text Mining and Applications

Room: Aula Magna Chair: Joaquim Silva

- 16:30 Recognizing Humor in Portuguese: First Steps
 André Clemêncio, Ana Alves and Hugo Gonçalo Oliveira
- 16:50 The Direct Path May Not Be The Best: Portuguese-Chinese Neural Machine Translation
 Rodrigo Santos, João Silva, António Branco and Deyi Xiong
- 17:10 Using Recurrent Neural Networks for Toponym Resolution in Text
 Ana Cardoso, Bruno Martins and Jacinto Estima

Wednesday, September 4

IROBOT - Intelligent Robotics

Room: Aula Magna Chair: Nuno Lau

- 9:00 Online Optimization of Movement Cost for Robotic Applications of PSO
 Sebastian Mai, Heiner Zille, Christoph Steup and Sanaz Mostaghim
- 9:20 Path planning algorithms benchmarking for grapevines pruning and monitoring
 Sandro Magalhães, Filipe Santos, Rui Martins, Luís Rocha and José Brito
- 9:40 Monocular Visual Odometry Using Fisheye Lens Cameras
 André Aguiar, Filipe Santos, Luís Santos and Armando Sousa
- 10:00 A Comparison Procedure for IMUs Performance
 Tiago Mendonça, Diana Guimarães, António P. Moreira and Paulo Costa
- 10:20 Application of the Open Scalable Production System to Machine Tending of Additive Manufacturing operations by a Mobile Manipulator
 Rafael Arrais, Tiago Ribeiro, Daniel Oliveira, Ramon Fernandes, André Conceição, Paulo Farias and Germano Veiga
- 10:40 Do You Trust Me? Investigating the Formation of Trust in Social Robots
 Mojgan Hashemian, Raul Paradedá, Carla Guerra and Ana Paiva

SSM - Social Simulation and Modelling

Room: Auditório 1 Chair: Luís Antunes

- 9:00 Reflections on Social Simulation and Complexity
 Helder Coelho
- 9:20 Emergency evacuation simulation in open air events using a floor field cellular automata model
 Dionysios Strongylis, Charalampos Kouzinopoulos, Georgios Stavropoulos, Konstantinos Votis and Dimitrios Tzovaras

- 9:40 Agent-based Simulation of Local Soy Value Chains in Ghana
Tim Verwaart, Youri Dijkxhoorn, Christine Plaisier and Coen van Wagenberg

AIL - Artificial Intelligence and Law

Room: Auditório 1 Chair: Pedro Freitas, Co-Chair: Massimo Durante

- 10:00 Learning from Monkeys: Authorship Issues arising from AI Technology
Jacopo Ciani
- 10:20 Legal Implications of Autonomous Vehicles: What We Know So Far and What's Left to Work On
Beatriz Assunção Ribeiro, Helder Coelho, Elisabete F. E. Dias Pereira and João Branquinho
- 10:40 The role of Artificial Intelligence in the European e-Justice paradigm – suiting effective judicial protection demands
Joana Covelo de Abreu

AIoTA-1 - Artificial Intelligence and IoT in Agriculture

Room: Auditório 2 Chair: José Boaventura Cunha, Co-chair: Raul Morais

- 9:00 Vineyard segmentation from satellite imagery using machine learning
Luís Santos, Filipe N. Santos, Vitor Filipe and Pranjali Shinde
- 9:20 Estimation of vineyard productivity map using cost-effective LIDAR solution
Pedro Moura, Daniela Ribeiro, Filipe Neves Dos Santos, Alberto Gomes, Ricardo Baptista and Mário Cunha
- 9:40 An Image-based Deep Learning Model for Cannabis Diseases, Nutrient Deficiencies and Pests Identification
Konstantinos Ferentinos, Myrto Barda and Dave Damer
- 10:00 Detection of Tomato Flowers from Greenhouse Images using Colorspace Transformations
Manya Afonso, Angelo Mencarelli, Gerrit Polder, Ron Wehrens, Dick Lensink and Nanne Faber
- 10:20 Metbots: Metabolomics Robots for Precision Viticulture
Rui Martins, Sandro Magalhães, Pedro Jorge, Teresa Barroso and Filipe Santos
- 10:40 Nature inspired metaheuristics and their applications in agriculture: A short review
Jorge Mendes, Paulo Moura Oliveira, Filipe Santos and Raul Morais

KDBI-1 - Knowledge Discovery and Business Intelligence

Room: Auditório 1 Chair: Paulo Cortez

- 14:00 A Context-Aware Recommender Method based on Text Mining
Camila Vaccari Sundermann, Renan De Pádua, Vítor Rodrigues Tonon, Marcos Aurélio Domingues and Solange Oliveira Rezende
- 14:20 Using Neuroevolution for Predicting Mobile Marketing Conversion
Pedro Pereira, Pedro Pinto, Paulo Cortez, Rui Mendes and Antoine Moreau
- 14:40 Discovering Common Pathways Across Users' Habits in Mobility Data
Thiago Andrade, Brais Cancela and João Gama
- 15:00 Mining Exceptional Social Behaviour
Carolina Centeio-Jorge, Martin Atzmueller, Behzad M. Heravi, Jenny L. Gibson, Cláudio Rebelo de Sá and Rosaldo Rossetti
- 15:20 Extracting actionable knowledge to increase business utility in sport services
Paulo Pinheiro and Luís Cavique

GAI-2 - General Artificial Intelligence

Room: Aula Magna Chair: Luís Paulo Reis

- 14:00 Automatic Switching Between Video and Audio According to Users Context
Paulo Ferreira, João Cardoso and João Mendes-Moreira
- 14:20 An Adaptive and Transferable Dialog Management System for Social Aware Task Execution
Antonio Capela, Samuel Mascarenhas, Pedro Santos and Manuel Lopes
- 14:40 Energy Efficient Smartphone-based Users Activity Classification
Ricardo Magalhães, João Cardoso and João Mendes-Moreira
- 15:00 Learning Regularization Parameters of Radial Basis Functions in Embedded Likelihoods Space
Murilo V. Ferreira Menezes, Luiz C. Bambera Torres and Antônio De Pádua Braga
- 15:20 Using Deep Learning Techniques for Authentication of Amadeo de Souza Cardoso Paintings and Drawings
Ailin Chen, Rui Jesus and Marcia Villarigues

MASTA - MultiAgent Systems: Theory and Applications

Room: Auditório 2 Chair: Henrique Lopes Cardoso

- 14:00 Self-adaptive Team of Aquatic Drones with a Communication Network for Aquaculture
Daniela Sousa, Susana Sargento, Artur Pereira and Miguel Luís
- 14:20 Assessment of Testability on Multiagent Systems Developed with Organizational Model Moise
Eder Mateus Gonçalves, Bruno Coelho Rodrigues and Ricardo Arend

- 14:40 Fair Division Minimizing Inequality
Martin Aleksandrov, Toby Walsh and Cunjing Ge
- 15:00 Semantic Web Services for Multi-Agent Systems Interoperability
Alda Canito, Gabriel Santos, Juan Corchado, Goreti Marreiros and Zita Vale
- 15:20 Ising Model as a Switch Voting Mechanism in Collective Perception
Palina Bartashevich and Sanaz Mostaghim

AmIA - Ambient Intelligence and Affective Environments

Room: Auditório 1 Chair: Goreti Marreiros

- 16:00 Analyzing User Experiences in Incorporated Fictionality
Tatsuo Nakajima, Risa Kimura, Fumiko Ishizawa and Mizuki Sakamoto
- 16:20 The Influence of Age and Gender in the Interaction with Touch Screens
Rodrigo Rocha, Davide Carneiro and Paulo Novais
- 16:40 Agent-based Education Environment in Museums
Ichiro Satoh
- 17:00 Describing Interfaces in the framework of Adaptive Interface Ecosystems
Antonio Sánchez, Elena Hernández Nieves, Sara Rodríguez, Fernando De La Prieta and Juan Manuel Corchado
- 17:20 A Conceptual Approach to Enhance the Well-Being of Elderly People
Diogo Martinho, João Carneiro, Paulo Novais, José Neves, Juan Corchado and Goreti Marreiros
- 17:40 Blended Learning in Smart Learning Environments
Peter Mikulecky
- 18:00 Facial virtual tracking: a system to mirror emotions
Pedro Santos, Vinicius Silva, Filomena Soares and Alberto Simões

ALEA - Artificial Life and Evolutionary Algorithms

Room: Aula Magna Chair: Ivo Gonçalves

- 16:00 Benchmarking Collective Perception: New Task Difficulty Metrics for Collective Decision-Making
Palina Bartashevich and Sanaz Mostaghim
- 16:20 Maximum Search Limitations: Boosting Evolutionary Particle Swarm Optimization Exploration
Mário Tasso Serra, Marco Mollinetti, Vladimiro Miranda and Leonel Carvalho

- 16:40 Interval Differential Evolution Using Structural Information of Global Optimization Problems
Mariane Cassenote, Guilherme Derenievicz and Fabiano Silva
- 17:00 Hierarchical Classification of Transposable Elements with a Weighted Genetic Algorithm
Gean Pereira, Paulo Gabriel and Ricardo Cerri
- 17:20 Comparison of Genetic Algorithms and Particle Swarm Optimization to Estimate Cluster-based Kriging Parameters
Carlos Takeshi Yasojima, Tiago Araujo, Bianchi Meiguins, Nelson Neto and Jefferson Morais
- 17:40 A 3-step Cartesian Genetic Programming for Designing Combinational Logic Circuits with Multiplexers
Jose Eduardo da Silva and Heder Bernardino
- 18:00 Extending Local Search in Geometric Semantic Genetic Programming
Mauro Castelli, Luca Manzoni, Luca Mariot and Martina Saletta

AIM - Artificial Intelligence in Medicine

Room: Auditório 2 Chair: Manuel Filipe Santos

- 16:00 Heart Sounds Classification Using Images from Wavelet Transformation
Diogo Nogueira, Mohammad Zarmehri, Carlos Ferreira, Alípio Jorge and Luís Antunes
- 16:20 A Multi-Modal Deep Learning Method for Classifying Chest Radiology Exams
Nelson Nunes, Bruno Martins, Nuno André da Silva, Francisca Leite and Mário Silva
- 16:40 Named Entity Recognition in Portuguese Neurology Text using CRF
Fábio Lopes, César Teixeira and Hugo Gonçalo Oliveira
- 17:00 Intelligent Control of an Exoskeleton for Rehabilitation Purposes using a ROS-based Software Architecture
Nieves Pavon-Pulido, Juan Antonio López Riquelme and Jorge Feliu Batlle
- 17:20 Comparison of Conventional and Deep Learning based Methods for Pulmonary Nodule Segmentation in CT Images
Joana Rocha, António Cunha and Ana Maria Mendonça
- 17:40 Intelligent Virtual Assistant for Promoting Behaviour Change in Older People with T2D
João Balsa, Pedro Neves, Isa Félix, Mara Pereira Guerreiro, Pedro Alves, Maria Beatriz Carmo, Diogo Marques, António Dias, Adriana Henriques and Ana Paula Cláudio
- 18:00 Towards to use Image Mining to predict skin problems - A melanoma case study
Pamela Coelho, Cláudio Gonçalves, Filipe Portela and Manuel Filipe Santos

Thursday, September 5

KRR - Knowledge Representation and Reasoning

Room: Auditório 1 Chair: Matthias Knorr Co-chair: Ricardo Gonçalves

- 9:00 On Unordered BDDs and Quantified Boolean Formulas
Mikolas Janota
- 9:20 Using Summarization Techniques on Patent Database through Computational Intelligence
Cinthia Souza, Matheus Santos, Magali Meireles and Paulo Almeida
- 9:40 A Complete Planner for Temporal Answer Set Programming
Pedro Cabalar, Manuel Rey and Concepcion Vidal
- 10:00 An Argumentative Characterization of Disjunctive Logic Programming
Ofer Arieli and Jesse Heyninck
- 10:20 Computing Shortest Resolution Proofs
Carlos Mencía and Joao Marques-Silva
- 10:40 Forgetting in Answer-Set Programming with Anonymous Cycles
Matti Berthold, Ricardo Gonçalves, Matthias Knorr and Joao Leite

KDBI-2 - Knowledge Discovery and Business Intelligence

Room: Aula Magna Chair: Luís Cavique

- 9:00 Online Clustering For Novelty Detection And Concept Drift in Data Streams
Kemilly Garcia, Mannes Poel, Joost Kok and André de Carvalho
Online Clustering For Novelty Detection And Concept Drift in Data Streams
- 9:20 Sibilant consonants classification with deep neural networks
Ivo Anjos, Nuno Marques, Margarida Grilo, Isabel Guimarães, João Magalhães and Sofia Cavaco
- 9:40 Visual Analysis of Regression Error
Inês Areosa and Luis Torgo
- 10:00 Discovering Analytical Preferences for Personalizing What-If Scenarios
Mariana Carvalho and Orlando Belo
- 10:20 Semantic Segmentation of High-Resolution Aerial Imagery with W-Net Models
Maria Dias, João Monteiro, Joel Silva, Jacinto Estima and Bruno Martins

AITTS-1 - Artificial Intelligence in Transportation Systems

Room: Auditório 2 Chair: Rosaldo Rossetti

- 9:00 VDS Data-based Deep Learning Approach for Traffic Forecasting using LSTM Network

Hongsuk Yi and Khac-Hoai Nam Bui

- 9:20 A Reinforcement Learning Approach to Smart Lane Changes of Self-Driving Cars
Fangmin Ye, Long Wang, Yibing Wang, Jingqiu Guo, Ioannis Papamichail and Markos Papageorgiou
- 9:40 LSTM-Based Anomaly Detection: Detection Rules from Extreme Value Theory
Neema Davis, Gaurav Raina and Krishna Jagannathan
- 10:00 Neural Network based Large Neighborhood Search Algorithm for Ride Hailing Services
Arslan Ali Syed, Karim Akhnoukh, Bernd Kaltenhaeuser and Klaus Bogenberger
- 10:20 Predicting Air Compressor Failures Using Long Short Term Memory Networks
Kunru Chen, Sepideh Pashami, Yuantao Fan and Slawomir Nowaczyk
- 10:40 Travel Demand Forecasting: an Evolutionary Learning Approach
Chaima A. K. Djellab, Walid Chaker and Henda H. B. Ghezala

Friday, September 6

AITTS-2 - Artificial Intelligence in Transportation Systems

Room: Auditório 1 Chair: Alberto Fernández

- 9:00 Camera Calibration for CNN based Generic Obstacle Detection
Radu Danescu and Razvan Itu
- 9:20 Counting Cars From Aerial Videos Using Deep Learning
Caio Polidoro, Wellington Castro, Jose Marcato, Geison Salgado Filho and Edson Matsubara
- 9:40 How the Quality of Call Detail Records Influences the Detection of Commuting Patterns
Joel Pires, Aldina Piedade, Marco Veloso, Santi Phithakkitnukoon, Zbigniew Smoreda and Carlos Bento
- 10:00 Warranty Claim Rate Prediction using Logged Vehicle Data
Reza Khoshkangini, Sepideh Pashami and Slawomir Nowaczyk
- 10:20 Anomaly Detection in Vehicle Traffic Data using Batch and Stream Supervised Learning
David Faial, Flavia Bernardini, Leandro Miranda and José Viterbo
- 10:40 Predicting the impact of text-reading using decision trees
Eftihia Nathanail, Panos Prevedouros, Md Mintu Miah and Rafaela De Melo Barros

AIPES-1 - Artificial Intelligence in Power and Energy Systems

Room: Aula Magna Chair: Tiago Pinto

- 9:00 Explorative Spatial Data Mining for Energy Technology Adoption and Policy Design Analysis

- Fabian Heymann, Filipe Joel Soares, Pablo Duenas and Vladimiro Miranda
- 9:20 Distributed Constrained Optimization Towards Effective Agent-based Microgrid Energy Resource Management
Fernando Lezama, Enrique Munoz de Cote, Alessandro Farinelli, Joao Soares, Tiago Pinto and Zita Vale
- 9:40 A Fuzzy System Applied to Photovoltaic Generator Management Aimed to Reduce Electricity Bill
Marcos Sousa and Filipe Saraiva
- 10:00 Demonstration of an Energy Consumption Forecasting System for Energy Management in Buildings
Aria Jozi, Daniel Ramos, Luís Gomes, Pedro Faria, Tiago Pinto and Zita Vale
- 10:20 Smart Home appliances usage recommendation using multi-objective optimization
Allan Feitosa, Henrique Lacerda and Abel Silva-Filho

AIoTA-2 - Artificial Intelligence and IoT in Agriculture

Room: Auditório 2 Chair: Raul Morais Co-Chair: José Boaventura

- 9:00 On KNoT meta platform for IoT-based Control of Storage Grains
João Quaresma, Josenalde Oliveira and José Boaventura Cunha
- 9:20 Grapevine Varieties Classification Using Machine Learning
Pedro Marques, Luís Pádua, Telmo Adão, Jonáš Hruška, José Sousa, Emanuel Peres, Joaquim Sousa, Raul Morais and António Sousa
- 9:40 Cyberphysical network for crop monitoring and fertigation control
João Paulo Coelho, Higor Vendramini Rosse, José Boaventura-Cunha and Tatiana Martins Pinho
- 10:00 Soil Classification Based on Physical and Chemical Properties Using Random Forests
Didier Dias, Bruno Martins, João Pires, Luis de Sousa and Carlos Damásio
- 10:20 Low-cost IoT LoRa solutions for Precision Agriculture monitoring practices
Nuno Silva, Jorge Mendes, Renato Silva, Filipe Santos, Pedro Mestre, Carlos Serôdio and Raul Morais
- 10:40 A low-cost system to estimate Leaf Area Index combining Stereo Images and Normalized Difference Vegetation Index
Jorge Mendes, Vítor Filipe, Filipe Santos and Raul Morais

AI4GAMES - Artificial Intelligence for Games

Room: Auditório 1 Chair: Gustavo Reis Co-Chair: Alberto Simões

- 15:00 Reinforcement Learning in Multi-Agent Games: Open AI Gym Diplomacy Environment

- José Aleixo Cruz, Diogo Cruz and Henrique Lopes Cardoso
- 15:20 Voxel based Pathfinding with Jumping for Games
Gabriel Silva, Gustavo Reis and Carlos Grilo
- 15:40 Solving Motion and Action Planning for a Cooperative Agent Problem using Geometry Friends
Ana Salta, Rui Prada and Francisco Melo
- 16:00 Spatio-Temporal Attention Deep Recurrent Q-Network for POMDPs
Mariano Etchart, Pawel Ladosz and David Mulvaney

AIPES- 2 - Dominoes Summer School

Room: Aula Magna Chair: Zita Vale, Polytechnic of Porto, Portugal

- 15:00 To be announced.
- 15:20 Danial Esmaeli Aliabadi, Sabanci University, Turkey
- 15:40 Jan Segerdstam, Empower, Finland
- 16:00 José Sousa, Energias de Portugal. Distribuição (EDPD), Portugal

AIoTA-3 - Artificial Intelligence and IoT in Agriculture

Room: Auditório 2 Chair: Paulo Moura Oliveira Co-Chair: Josenalde Barbosa

- 15:00 Classification of an Agrosilvopastoral System Using RGB Imagery From an Unmanned Aerial Vehicle
Luís Pádua, Nathalie Guimarães, Telmo Adão, Pedro Marques, Emanuel Peres, António Sousa and Joaquim João Sousa
- 15:20 Digital Ampelographer: a CNN based preliminary approach
Telmo Adão, Tatiana Pinho, António Ferreira, António Sousa, Luís Pádua, José Sousa, Joaquim João, Emanuel Peres and Raul Morais

AICPDES- Artificial Intelligence in Cyber-Physical and Distributed Embedded Systems

Room: Auditório 2 Chair: Thiago Rúbio

- 15:40 Leveraging Blockchain Smart Contracts Regulation With Agent-Based Markets
Thiago Rúbio, Zafeiris Kokkinogenis, Henrique Lopes Cardoso, Rosaldo Rossetti and Eugénio Oliveira
- 16:00 Machine learning for radar-based people detection
José Castanheira, Francisco Curado, Ana Tomé and Edgar Gonçalves

AIEd - Artificial Intelligence in Education

Room: Auditório 1 Chair: Vitor Santos Co-Chair: Dalila Durães

- 16:30 Combining Sentiment Analysis Scores to Improve Accuracy of polarity classification in MOOC posts
Herbert Laroca Pinto and Vitor Rocio
- 16:50 A Data Mining Approach Applied to the High School National Examination: Analysis of aspects of candidates to Brazilian Universities
Diego Rodrigues, Márcio Lima, Marcos Conceição, Vilson Siqueira and Rommel Barbosa
- 17:10 Between Clones and Snow-Flakes : Personalization in Intelligent Tutoring Systems
Francisco Azeiteiro and Manuel Lopes
- 17:30 Student Attention Evaluation System using Machine Learning for Decision Making
Dalila Durães

AIPES-3 - Artificial Intelligence in Power and Energy Systems

Room: Aula Magna Chair: Pedro Faria

- 16:30 Hyper-Parameter Optimization of Multi-Attention Recurrent Neural Network for Battery State of Charge Forecasting
Aleksi Mashlakov, Ville Tikka, Lasse Lensu, Aleksi Romanenko and Samuli Honkapuro
- 16:50 Gradient boosting ensembles for predicting heating and cooling loads in building design
Leonardo Goliatt, Priscila V. Z. Capriles and Gisele Goulart Tavares
- 17:10 Short-term streamflow forecasting for Paraíba do Sul river using Deep Learning
Luciana Campos, Leonardo Goliatt, Tales Fonseca, Gabriel Abreu, Letícia Pires and Yulia Gorodetskaya
- 17:30 Contextual simulated annealing Q-learning for pre-negotiation of agent-based bilateral negotiations
Tiago Pinto and Zita Vale
- 17:50 Fair remuneration of energy consumption flexibility using Shapley value
Ricardo Faia, Tiago Pinto and Zita Vale