

José Machado
Universidade do Minho
Departamento de Informática
ALGORITMI Center
Campus of Gualtar
4710 - 057 BRAGA
PORTUGAL

Email: jmac@di.uminho.pt ORCID: 0000-0003-4121-6169 ResearcherID: B-5887-2009 Scopus Author ID: 56196003100

José Machado is Full Professor of the Department of Informatics, University of Minho. He is at the University of Minho since 1988. He got his PhD in Computer Science in 2002 and Habilitation in 2011. He taught more than 50 curricular units in the topics of Databases, Artificial Intelligence, Knowledge Engineering, Intelligent Systems, Medical Informatics, Computer Science for Law and Informatics in different and related fields of Computer Engineering. He has always prioritized work in scientific R&D groups geared towards application in industrial domains and public services, in particular courts, hospitals, and city councils. He has participated in dozens of publicly funded projects through FCT, the European Community or through the provision of services to the Community. He is one of the authors of the AIDA platform, which is an example of the success of the strategy followed in terms of technology transfer from the University to abroad, having received several national or international prizes (Hospital of the Future 2007, 2008 and 2009, Good Practices in Health 2014, Portugal Digital Awards 2016, IHF Awards 2021, Portugal Digital Awards 2023). He also co-authored the first version of the Diploma Supplement which follows the model developed by the European Commission, Council of Europe and UNESCO / CEPES. He was director (2018-24) and Associate Director (2016-17) of the ALGORITMI R&D Center. He is a founding member and header of the Computer Science and Technology research group, and he is founder and header of "Knowledge Engineering" lab. ALGORITMI is one of the largest national centers recognized by the FCT in TICE, having in January 2021 more than 500 members (206 PhD researchers). He is former Director of the CCTC-Center for Computer Science and Technology (2013-2015). He is the coordinating of the ERASMUS at the University of minho (in Medical Informatics) and he is former PhD Director of the PhD program in Biomedical Engineering (2020-22). He concluded the supervision of 16 PhDs; 100 MSc students and 4 Pos-Doc grants. He was also evaluator of research projects from scientific entities of Swiss, Canada, Peru, UAE and Portugal (ANI, FCT and MIT Portugal), as well as of the ALBAN program. He led the project DRIVES-Development and Research on Innovative Vocational Education Skills, in the University of Minho, involving 23 institutions from 11 European countries. He led also the Project intitled "Integrated and Innovative Solutions for the well-being of people in complex urban centers (NORTE-2020)". He is or was involved in the collaboration projects between Bosch Car Multimedia and ALGORITMI. He has around 500 publications in books, book chapters, journals, and proceedings of international and national conferences, of which around 400 are already indexed (ISI, Scopus, DBLP or ACM). He has in Scopus more than 2400 citations, h-index = 24, i10 = 76, authors from 43 different countries. He is editor of BiomedInformatics-MDPI, associate editor of IJRQEH-IGI Global and Frontiers in Public Health (section Disaster and Emergency Medicine), a member of the "editorial advisory board" of 4 international journals or "book series", member of the editorial board of 11 international journals (e.g Applied Sciences-MDPI, Artificial Intelligence-MDPI, Knowledge-MDPI, Scalable Information Systems-EAI Transactions, Open Computer Science-De Gruyter) and was a reviewer of more than 50 articles in international journals (e.g. IJERPH-MDPI, Mathematical Problems in Engineering-Hindawi, Journal of Ambient Intelligence and Humanized Computing-Springer, International Journal of Medical Informatics-Elsevier, Computer Methods and Programs in Biomedicine-Elsevier, Journal of Clinical Medicine-MDPI, Frontiers of Medicine-Frontiers, Journal of Biomedical Informatics-Elsevier, Health Informatics Journal-Sage, Expert Systems-Wiley). He has been a reviewer of publications at international conferences more than 200 times, including IEEE CEC, IJCAI, EPIA, IBERAMIA and AAMAS. He was conference chair of 6 international conferences (EPIA 2007, EPIA 2024, ESM, ISC, DCAI, BLOCKCHAIN), involved in the organization committee of 6 international conferences (EUMAS, ICMA, ECEA, EAI, DCAI, BLOCKCHAIN) and organized 41 workshops or special sessions. He was a member of the board of the Portuguese Association for Artificial Intelligence (2006-2013) and he is the chair of the IEEE Computational Intelligence Society, Portuguese Chapter (2020-2021).

The CV is online at http://www.di.uminho.pt/~jmm

Last Publications in Journals:

Regina Sousa, Vasco Abelha, Hugo Peixoto and José Machado, Unlocking healthcare data potential: A comprehensive integration approach with GraphQL, openEHR, Redis, and Pervasive Business Intelligence, in Technologies, MDPI, 2024.

JCR IF 2023: 4,2 (ENGINEERING, MULTIDISCIPLINARY (Q1))

SJR 2023: 0,86 (Computer Science (miscellaneous) (Q1))

José Machado, Regina Sousa, Hugo Peixoto and António Abelha, Ethical Decision-Making in Artificial Intelligence: A Logic Programming Approach, in Al 5(4), MDPI, 2024.

JCR IF 2023: 3,1 (COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE (Q2), COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS (Q2))

SJR 2023: 0,76 (Artificial Intelligence (Q2))

Diana Ferreira, Cristiana Neto, Francini Hak, António Abelha, Manuel Santos, José Machado, Standardizing Corneal Transplantation Records with openEHR: Case Study, in JMIR Medical Informatics, 2024 (Accepted) JCR IF 2023: 3,1 (MEDICAL INFORMATICS (Q2))

SJR 2023: 0,95 (Health Informatics (Q2); Health Information Management (Q2))

Anabela Silva, Paulo Sampaio and José Machado, Predictive Quality Model for Customer Defects, in The TQM Journal, Vol. 36 No. 9, Emerald Publishing, 2024.

JCR IF 2023: 3,8 (MANAGEMENT (Q2))

SJR 2023: 0,94 (Business and International Management (Q1); Business, Management and Accounting (miscellaneous) (Q1); Decision Sciences (miscellaneous) (Q2); Strategy and Management (Q2))

José Machado, António Chaves, Larissa Montenegro, Carlos Alves, Dalila Durães, Ricardo Machado and Paulo Novais, Behaviour of Machine Learning Algorithms in the Classification of Energy Consumption in school buildings, in Logic Journal of the IGPL, Oxford, 2024

JCR IF 2022: 1.00 (Q1-LOGIC, Q2-MATHEMATICS, Q3-MATHEMATICS)

SJR 2023: 0.28 (Q2-Philosophy, Q3-Logic)

Rui Miranda, Carlos Alves, Regina Sousa, António Chaves, Larissa Montenegro, Hugo Peixoto, Dalila Durães, Ricardo Machado, António Abelha, Paulo Novais and José Machado, Revolutionising the Quality of Life: The Role of Real-Time Sensing in Smart Cities, in Electronics, 13(3), 2024.

JCR IF 2022: 2.9 (Q2-ENGINEERING, ELECTRICAL & ELECTRONIC; Q3-COMPUTER SCIENCE, INFORMATION SYSTEMS)

SJR 2023: 0.64 (Q2-Computer Networks and Communications)

Hien Nguyen, Vuong Pham, Hunq Ngo, Anh Huynh, Binh Nguyen and José Machado, Intelligent search system for resume and labor law, in PeerJ Computer Sccience 10, 2024.

JCR IF 2022: 3.8 (Q2- COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE; Q2-COMPUTER SCIENCE, INFORMATION SYSTEMS; Q2- COMPUTER SCIENCE, THEORY & METHODS)

SJR 2023: 0.88 (Q2-Computer Science (miscellaneous))

Fábio Gonçalves, Gonçalo Silva, Alexandre Santos, Ana M. Rocha, Hugo Peixoto, Dalila Durães and José Machado, Urban Traffic Simulation Using Mobility Patterns Synthesized from Real Sensors, in Electronics 2023, 12(24), 2023.

JCR IF 2022: 2.9 (Q2-ENGINEERING, ELECTRICAL & ELECTRONIC; Q3-COMPUTER SCIENCE, INFORMATION SYSTEMS)

SJR 2023: 0.64 (Q2-Computer Networks and Communications)

António Linhares Silva. Pedro Oliveira. Dalila Durães. Duarte Fernandes. Rafael Névoa. João Monteiro. Pedro Melo-Pinto. José Machado and Paulo Novais. A Framework for Representing. Building and Reusing Novel State-of-the-Art Three-Dimensional Object Detection Models in Point Clouds Targeting Self-Driving Applications. in Sensors 2023.

JCR IF 2022: 3.9 (Q2-ENGINEERING, ELECTRICAL & ELECTRONIC; Q2-INSTRUMENTS & INSTRUMENTATION)

SJR 2023: 0.79 (Q1-Instrumentation Q2-Information Systems)

José Machado. Carla Rodrigues. Regina Sousa and Luis Mendes Gomes. Drug-Drug Interaction Extraction-Based System: a natural language processing approach. in Expert Systems. e13303. Wiley-Blackwell Publishing Ltd. 2023

JCR IF 2022: 3.3 (Q2-COMPUTER SCIENCE, THEORY & METHODS; Q3-COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE)

SJR 2023: 0.76 (Q2-Artificial Intelligence)

Oliveira D., Ferreira D., Abreu N., Leuschner P., Abelha A., Machado J.; Prediction of COVID- 19 Diagnosis Based on OpenEHR Artefacts; in Scientific Reports, 12(1); 2022

JCR IF 2022: 4.6 (Q2-MULTIDISCIPLINARY SCIENCES)

SJR 2022: 0.97 (Q1-Multidisciplinary)

Ferreira D., Neto C., Lopes J., Duarte J., Abelha A., Machado J. Predicting the Survival of Primary Biliary Cholangitis Patients. in Applied Sciences. MDPI. 2022 (Accepted); Predicting the Survival of Primary Biliary Cholangitis Patients; in Applied Sciences (Switzerland); 2022

JCR IF 2022: 2.7 (Q2-ENGINEERING, MULTIDISCIPLINAR

SJR 2022: 0.49 (Q2-Engineering (Miscellaneous) Q3-Computer Science Applications)

Montenegro L., Fred A.L., Abreu M., Machado J.; Human-Assisted vs Deep Learning Feature Extraction: An Evaluation of ECG Features Extraction Methods for Arrhythmia Classification Using Machine Learning.; in Applied Sciences (Switzerland); 2022

JCR IF 2022: 2.7 (Q2-ENGINEERING, MULTIDISCIPLINAR

SIR 2022: 0.49 (Q2-Engineering (Miscellaneous) Q3-Computer Science Applications)

Brito C., Esteves M., Peixoto H., Abelha A., Machado J.; A data mining approach to classify serum creatinine values in patients undergoing continuous ambulatory peritoneal dialysis; in Wireless Networks; 2022

JCR IF 2022: 3.00 (Q2-ENGINEERING, ELECTRICAL & ELECTRONIC; Q3-COMPUTER SCIENCE, INFORMATION SYSTEMS)

SJR 2022: 0.66 (Q2-Information Systems)

Reinolds, F., Neto, C., Machado, J.; Deep Learning for Activity Recognition Using Audio and Video; in Electronics (Switzerland); 2022

JCR IF 2022: 2.9 (Q2-ENGINEERING, ELECTRICAL & ELECTRONIC; Q3-COMPUTER SCIENCE, INFORMATION SYSTEMS)

SJR 2022: 0.63 (Q2-Computer Networks and Communications)

Esteves M., Abelha A., Machado J.; The development of a pervasive Web application to alert patients based on business intelligence clinical indicators: a case study in a health institution; in Wireless Networks; 2022

JCR IF 2022: 3.00 (Q2-ENGINEERING, ELECTRICAL & ELECTRONIC; Q3-COMPUTER SCIENCE, INFORMATION SYSTEMS)

SJR 2022: 0.66 (Q2-Information Systems)

Santos, F., Durães, D., Marcondes, F.S., Hammerschmidt, N., Machado, J., Novais, P.; Weakness Evaluation on In-Vehicle Violence Detection: An Assessment of X3D, C2D and I3D against FGSM and PGD; in Electronics, 2022

JCR IF 2022: 2.9 (Q2-ENGINEERING, ELECTRICAL & ELECTRONIC; Q3-COMPUTER SCIENCE, INFORMATION SYSTEMS)

SJR 2022: 0.63 (Q2-Computer Networks and Communications)

Martins B., Ferreira D., Neto C., Abelha A., Machado J.; Data Mining for Cardiovascular Disease Prediction; in Journal of Medical Systems; 2021

JCR IF 2021: 4.92 (Q2-Medical Informatics; Q1-Healthcare Sciences and Services) SJR 2021: 1.13 (Q1-Information Systems)

Neto C., Senra F., Leite J., Rei N., Rodrigues R., Ferreira D., Machado J.; Different Scenarios for the Prediction of Hospital Readmission of Diabetic Patients; in Journal of Medical Systems; 2021

JCR IF 2021: 4.92 (Q2-Medical Informatics; Q1-Healthcare Sciences and Services) SJR 2021: 1.13 (Q1-Information Systems)

Sousa, R., Lima, T., Abelha, A., Machado, J.; Hierarchical Temporal Memory Theory Approach to Stock Market Time Series Forecasting; in Electronics (Switzerland); 2021

JCR IF 2021: 2.69 (Q3-COMPUTER SCIENCE, INFORMATION SYSTEMS; Q3-ENGINEERING, ELECTRICAL & ELECTRONIC)

SJR 2021: 0.59 (Q2-Computer Networks and Communications)

Lori, N., Neves, J., Machado, J.; Quantum field theory representation in quantum computation; in Applied Sciences (Switzerland); 2021

JCR IF 2021: 2.84 (Q2-ENGINEERING, MULTIDISCIPLINAR)

SJR 2021: 0.51 (Q2-Engineering (Miscallaneous) Q3-Computer Science Applications)

Sousa R., Miranda R., Veiga A., Alves C., Lori N., Machado J.; Software Tools for Conducting Real-Time Information Processing and Visualization in Industry: An Up-to-Date Review; in Applied Sciences (Switzerland); 2021

JCR IF 2021: 2.84 (Q2-ENGINEERING, MULTIDISCIPLINAR)

SJR 2021: 0.51 (Q2-Engineering (Miscallaneous) Q3-Computer Science Applications)

Ferreira D., Silva S., Abelha A., Machado J.; Recommendation system using autoencoders; in Applied Sciences (Switzerland); 2020

IF 2020: 2.68 (Q2-ENGINEERING, MULTIDISCIPLINAR)

SJR 2020: 0.44 (Q2-Computer Science Applications)

Esteves M., Esteves M., Abelha A., Machado J.; A proof of concept of a mobile health application to support professionals in a portuguese nursing home; in Sensors (Switzerland); 2019

JCR IF 2019: 3.03 (Q2-ENGINEERING, ELECTRICAL & ELECTRONIC; Q1-INSTRUMENTS & INSTRUMENTATION)

SJR 2019: 0.47 (Q1-Instrumentation Q2-Information Systems)

Aqra I., Ghani N.A., Maple C., Machado J., Safa N.S.; Incremental algorithm for association rule mining under dynamic threshold; in Applied Sciences (Switzerland); 2019

JCR IF 2019: 2.68 (Q2-ENGINEERING, MULTIDISCIPLINAR)

SJR 2019: 0.42 (Q1-Engineering)

Neto C., Brito M., Lopes V., Peixoto H., Abelha A., Machado J.; Application of data mining for the prediction of mortality and occurrence of complications for gastric cancer patients; in Entropy; 2019 JCR IF 2019: 2.50 (Q2-PHYSICS, MULTIDISCIPLINARY)

SJR 2019: 0.53 (Q2-Information Systems)

Da Silva Portela C.F., Dos Santos M.F.V.T., Da Silva Abelha A.C., Machado J.M., Silva A´M., Martins F.R.; Real-time intelligent decision support and monitoring system of critical patients [Sistema inteligente de apoio à decisão e monitorização de doentes críticos em tempo-real]; in Portuguese Journal of Public Health; 2017

SJR 2019: 0.22 (Q2-Health Policy)

Neves J., Vicente H., Esteves M., Ferraz F., Abelha A., Machado J., Machado J., Neves J., Ribeiro J., Sampaio L.; A Deep-Big Data Approach to Health Care in the AI Age; in Mobile Networks and Applications; 2018

JCR IF 2018: 2.39 (Q2 COMPUTER SCIENCE, HARDWARE & ARCHITECTURE; Q2-COMPUTER SCIENCE, INFORMATION SYSTEMS; Q2-TELECOMMUNICATIONS)
SJR 2018: 0.43 (Q2-Software)

Neves J., Martins M.R., Vilhena J., Neves J., Gomes S., Abelha A., Machado J., Vicente H.; A Soft Computing Approach to Kidney Diseases Evaluation; in Journal of Medical Systems; 2015 JCR IF 2016: 2.456 (Q2-Medical Informatics; Q2-Healthcare Sciences and Services) SJR 2015: 0.74 (Q2-Information Systems Q2-Health Informatics)

Andrade F., Novais P., Machado J., Neves J.; Contracting agents: Legal personality and representation;

in Artificial Intelligence and Law; 2007

JCR IF 2020: 2.67 (Q2- COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE; Q1-LAW SJR 2007: 0.56 (Q1-Law Q2-Artificial Intelligence)