Speaker: Catarina Silva, University of Coimbra, Portugal

Title: Interpretability and Explainability in Intelligent Systems

Abstract: Intelligent methods, as deep neural networks, are becoming standard goto algorithms for a wide range of applications. However, applicability in several critical applications, e.g., public policy, security/safety systems, health diagnosis and fraud detection, has been faced with some hurdles due to lack of model interpretability. Such systems suffer from interpretability/explainability issues and in this talk an overview of challenges and current approaches is presented, including case studies.

Biography: Catarina Silva is Assistant Professor at the Department of Informatics Engineering of the University of Coimbra. She has a PhD degree in Computer Engineering, with 20 years' experience teaching Computer Engineering BSc and MSc, while also supervising MSc and PhD students. She is a senior researcher at the Adaptive Computation Group of CISUC with machine learning and pattern recognition as main areas of research. Skilled at managing different sized projects and scientific entrepreneurships, involving people with different backgrounds, namely faculty, students, alumni, and companies. Author and co-author of 4 books, circa 20 journal articles and 50 conference papers. Scientific committee and paper reviewer of several conferences and journals. President of the General Assembly of the Portuguese association of pattern Recognition, IEEE senior member of the Computational Intelligence Society. Past-Chair of the IEEE Portugal Section.