

	<p align="center"><b>18<sup>th</sup> International Conference on Hybrid Intelligent Systems (HIS'2018)</b></p> <p align="center">Porto, Portugal, 13-15 December, 2018</p> <p align="center"><a href="http://www.mirlabs.org/his18/">http://www.mirlabs.org/his18/</a></p>
<b>Title of Session</b>	<b>Hybrid and Intelligent Decision Making Systems: Trends and Applications (HIDMS-T&amp;A)</b>
<b>Objectives and scope</b>	<p>Hybridization of intelligent systems is a promising research field of modern artificial/ computational intelligence concerned with the development of the next generation of intelligent systems.</p> <p>Therefore, this special session intends to bring together researchers worldwide to provide a contribution for solving artificial/ computational problems in the context of Hybrid Intelligent Decision Making Systems, for providing a contribution for solving real world complex problems, for instance involving big data, imprecision, uncertainty and vagueness.</p> <p>Through this special session the organizers intend to promote theoretical and empirical research, and invite researchers to contribute with original research articles as well as surveys and case study articles, for instance in the scope of the following main topics.</p>
<b>Topics of Interest</b>	<p>Topics of interest include but are not limited to the following:</p> <ul style="list-style-type: none"> <li>• Artificial neural network optimization using global optimization techniques</li> <li>• Interactions between neural networks and fuzzy inference systems</li> <li>• Fuzzy inference system optimization using global optimization algorithms</li> <li>• Hybrid computing using neural networks - fuzzy systems - evolutionary algorithms</li> <li>• Hybrid optimization techniques (evolutionary algorithms, simulated annealing, tabu search, GRASP etc.)</li> <li>• Hybrid of soft computing and statistical learning techniques</li> <li>• Human-Computer Interaction for Interactive Systems</li> <li>• Intelligent User Interfaces</li> <li>• User Modeling preferences</li> <li>• Natural interfaces and ambiguity solving techniques</li> <li>• Bio-Inspired Computation, Evolutionary Computing, Evolutionary Programming and Evolutionary Strategies, Meta-Heuristics: Theory and Foundations.</li> </ul>

	<ul style="list-style-type: none"> <li>• Intelligent Agents and Multi-Agent Systems</li> <li>• Complex and Biological Inspired systems</li> <li>• Cognitive Computing</li> <li>• Self-Organized and Distributed Systems</li> <li>• Block chain and Big data analysis on manufacturing systems and Supply chain</li> <li>• Applications: Manufacturing, Logistics and Supply chain management, Biomedical and Bioinformatics, Business, Medicine, Banking, Financing, Social Networks</li> </ul>
<b>Session Chair / Co-chair</b>	Ana Maria Madureira Leonilde Varela Vijaya Kumar Manupati
<b>Scientific Committee</b>	<b>(To be prepared...)</b>
<b>Contact Information</b>	Ana Maria Madureira, ISEP/IPP, Portugal, <a href="mailto:amd@isep.ipp.pt">amd@isep.ipp.pt</a> Leonilde Varela, Minho University, Portugal, <a href="mailto:leonilde@dps.uminho.pt">leonilde@dps.uminho.pt</a> Vijaya Kumar Manupati, NIT Warangal, India, <a href="mailto:manupativijay@gmail.com">manupativijay@gmail.com</a>
<b>Brief Biography of the session Organizers</b>	<p><b>Name: Ana Maria Dias Madureira Pereira</b></p> <p><b>Personal Data</b> Nationality: Portuguese</p> <p><b>Academic Titles</b></p> <ul style="list-style-type: none"> <li>• Graduated (Licenciatura) in Computer Science at Institute of Engineering - Polytechnic of Porto in 1993.</li> <li>• Master in Electrical and Computer Engineering in 1996 from Porto University</li> <li>• Ph.D. in Production and Systems in 2003 from Minho University</li> </ul> <p><b>Academic Career</b></p> <ul style="list-style-type: none"> <li>• From 1994 to 2001 - Teaching assistant at the Department of Computer Science Engineering of the Institute of Engineering (ISEP) of the Polytechnic Institute of Porto.</li> <li>• Since 2001 Professor at the Department of Computer Science Engineering of the School of Engineering (ISEP) of the Polytechnic Institute of Porto.</li> <li>• She has been responsible for several undergraduate and graduate final projects in the area of computer science and artificial intelligence.</li> </ul> <p><b>R&amp;D Activities</b></p> <ul style="list-style-type: none"> <li>• Main research interests: Artificial Intelligence, Decision-Support Systems, Optimization, Meta-heuristics, Evolutionary Computation, Scheduling, Manufacturing, Multi-Agent Systems, Autonomic Computing, Workflow, BPM.</li> <li>• Member of GECAD – Knowledge Engineering and Decision-Support Research Group, coordinates the Knowledge-based Systems and the Power Systems Groups</li> </ul>

- Coordinates R&D projects in the area of Artificial Intelligence and Distributed Scheduling, concerning namely the development of Multi-Agent System for Distributed Manufacturing Scheduling with Biologically Inspired Techniques and Autonomic Computing.
- Published more than 100 scientific papers in international conferences and in international scientific journals and books.

**Name: Maria Leonilde Rocha Varela**

**Personal Data**

Nationality: Portuguese

**Academic Titles**

- Graduated (Licenciatura) in Production and Systems – University of Minho in 1994.
- Master in Computer Integrated Manufacturing in 1999 from University of Minho
- Ph.D. in Production and Systems in 2007 from University of Minho.

**Academic Career**

- From 1994 to 2003 - Teaching assistant at the Department of Production and Systems of the School of Engineering of the Minho University.
- Since 2003 Assistant Professor at the Department of Production and Systems of the School of Engineering of the Minho University.
- She has been responsible for several undergraduate and graduate final projects in the area of Production and Systems.

**R&D Activities**

- Main research interests: Manufacturing Planning and Control, Scheduling, Decision-Support Systems, Web based systems and services, Optimization, Artificial Intelligence and Meta-heuristics.
- Member of the EWG-DSS – Euro Working Group of Decision Support Systems
- Coordinates R&D projects in the area of Production and Systems Engineering, concerning namely the development of Web-based platforms and decision support systems and methodologies.
- Published more than 100 scientific papers in international conferences and in international scientific books and journals.

**Name: Vijaya Kumar Manupati**

Nationality: Indian

**Academic Titles**

- He received his PhD in Industrial and Systems Engineering from Indian Institute of Technology, Kharagpur.

**Academic Career**

- He is working as Assistant Professor in the Department of Mechanical Engineering in NIT Warangal, India.

**R&D Activities**

- Main research interests: His research interests include intelligent manufacturing, integration of process planning and scheduling in manufacturing, Sustainable Supply Chain and Evolutionary Algorithms.
- He is a member of Institute of Industrial and Systems Engineering and of MirLabs, and a technical committee member of various International conferences.
- Coordinates R&D projects in the area of Industrial Management and Engineering, Concerning namely the development of optimization methods and tools.
- Published more than 60 scientific papers in international conferences and in international scientific books and journals, like International Journal of Production Research, Computers and Industrial Engineering, International Journal of Advanced Manufacturing Technology, Journal of Engineering, etc.