



# ICAIS'14

## 2014 International Conference on Adaptive and Intelligent Systems

September 8-10, 2014, Bournemouth - UK



### CALL FOR PAPERS

<b>General Chair</b>  <b>Hamid Bouchachia</b> (Bournemouth University, UK)	<b>Scope of ICAIS</b> <p>The ICAIS'14 conference aims at focusing on issues related to system adaptation and learning. It is the first conference that is entirely dedicated to this research area.</p> <p>Sponsored by world pioneering and leading scientific societies such as the IEEE Computational Intelligence Society and the International Neural Networks Society, ICAIS'14 strives to deepen understanding of various concepts such as online learning, self-growing, self-correction, self-organization, self-monitoring and many others which are at the heart of system adaptation.</p> <p>The 2014 edition will bring together international researchers, developers and practitioners from different horizons to discuss the latest advances in system learning and adaptation. ICAIS'14 will serve as a forum to present the current state of the art but also future research avenues of in this field of adaptive and intelligent systems.</p> <p>ICAIS will feature contributed papers as well as world-renowned guest speakers, interactive breakout sessions, and instructional workshops. Best papers will be selected for publication in two special issues of international journals. This year ICAIS focuses on the following main tracks:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><b>Track 1: Incremental Learning</b></p> <ul style="list-style-type: none"> <li>• Online incremental learning</li> <li>• Self-growing neural networks</li> <li>• Adaptive and life-long learning</li> <li>• Plasticity and stability</li> <li>• Forgetting</li> <li>• Unlearning</li> <li>• Novelty detection</li> <li>• Perception and evolution</li> <li>• Drift handling</li> <li>• Adaptation in changing environments</li> </ul> <p><b>Track 2: Online Processing</b></p> <ul style="list-style-type: none"> <li>• Adaptive rule-based systems</li> <li>• Adaptive identification systems</li> <li>• Adaptive decision systems</li> <li>• Adaptive preference learning</li> <li>• Time series prediction</li> <li>• Online and single-pass data mining</li> <li>• Online classification</li> <li>• Online clustering</li> <li>• Online regression</li> <li>• Online feature selection and reduction</li> <li>• Online information routing</li> </ul> <p><b>Track 3: Dynamic and Evolving Models in Computational Intelligence</b></p> <ul style="list-style-type: none"> <li>• (Dynamic) Neural networks architectures</li> <li>• (Dynamic) Evolutionary computation</li> <li>• (Dynamic) Swarm intelligence</li> <li>• (Dynamic) Immune and bacterial systems</li> <li>• Uncertainty and fuzziness modeling for adaptation</li> <li>• Approximate reasoning and adaptation</li> </ul> </div> <div style="width: 48%;"> <ul style="list-style-type: none"> <li>• Chaotic systems</li> </ul> <p><b>Track 4: Self-X Systems</b></p> <ul style="list-style-type: none"> <li>• Self-adaptation</li> <li>• Self-organization and behavior emergence</li> <li>• Self-managing</li> <li>• Self-healing</li> <li>• Self-monitoring</li> <li>• Multi-agent systems</li> <li>• Self-X software agents</li> <li>• Self-X robots</li> <li>• Self-organizing sensor networks</li> <li>• Evolving systems</li> </ul> <p><b>Track 5: Software &amp; System Engineering</b></p> <ul style="list-style-type: none"> <li>• Autonomic computing</li> <li>• Organic computing</li> <li>• Evolution</li> <li>• Adaptive software architecture</li> <li>• Software change</li> <li>• Software agents</li> <li>• Engineering of complex systems</li> <li>• Adaptive software engineering processes</li> <li>• Component-based development</li> </ul> <p><b>Track 6: Applications - Adaptivity and Learning</b></p> <ul style="list-style-type: none"> <li>• Smart systems</li> <li>• Ambient / ubiquitous environments</li> <li>• Distributed intelligence</li> <li>• Robotics</li> <li>• Industrial applications</li> <li>• Internet applications</li> <li>• Business applications</li> <li>• Supply chain management</li> <li>• etc.</li> </ul> </div> </div>																																							
<b>Keynote Speakers</b>  <b>Ludmila I Kuncheva</b> (Bangor University, UK) <b>João Gama</b> (University of Porto, Portugal) <b>Kurt Geihs</b> (University of Kassel, Germany)																																								
<b>International Program Committee</b>  <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><b>Plamen Angelov</b> (UK)</td> <td style="width: 50%; border: none;"><b>Trevor Martin</b> (UK)</td> </tr> <tr> <td style="border: none;"><b>Emili Balaguer-Ballester</b> (UK)</td> <td style="border: none;"><b>Jose Antonio Iglesias Martinez</b> (ES)</td> </tr> <tr> <td style="border: none;"><b>Albert Bifet</b> (NZ)</td> <td style="border: none;"><b>Christophe Marsala</b> (FR)</td> </tr> <tr> <td style="border: none;"><b>Nizar Bouguila</b> (CA)</td> <td style="border: none;"><b>Hammadi Nait-Charif</b> (UK)</td> </tr> <tr> <td style="border: none;"><b>Ahmed Bouridane</b> (UK)</td> <td style="border: none;"><b>Frank Neumann</b> (UK)</td> </tr> <tr> <td style="border: none;"><b>Martin Butz</b> (DE)</td> <td style="border: none;"><b>Seiichi Ozawa</b> (JP)</td> </tr> <tr> <td style="border: none;"><b>Heloisia Camargo</b> (BR)</td> <td style="border: none;"><b>Marcin Paprzycki</b> (PL)</td> </tr> <tr> <td style="border: none;"><b>André de Carvalho</b> (BR)</td> <td style="border: none;"><b>Mykola Pechenizkiy</b> (NL)</td> </tr> <tr> <td style="border: none;"><b>Emilio Corchado</b> (ES)</td> <td style="border: none;"><b>Jose de Jesus Rubio</b> (MX)</td> </tr> <tr> <td style="border: none;"><b>Damien Fay</b> (UK)</td> <td style="border: none;"><b>Ali Salah</b> (TR)</td> </tr> <tr> <td style="border: none;"><b>Joao Gama</b> (PT)</td> <td style="border: none;"><b>Daniel Sanchez</b> (ES)</td> </tr> <tr> <td style="border: none;"><b>Haibo He</b> (USA)</td> <td style="border: none;"><b>Moamar Sayed-Mouchweh</b> (FR)</td> </tr> <tr> <td style="border: none;"><b>Eyke Huellermeier</b> (DE)</td> <td style="border: none;"><b>Igor Škrjanc</b> (SI)</td> </tr> <tr> <td style="border: none;"><b>Ata Kaban</b> (UK)</td> <td style="border: none;"><b>Vaclav Snasel</b> (CZ)</td> </tr> <tr> <td style="border: none;"><b>Frank Klawonn</b> (DE)</td> <td style="border: none;"><b>Alexey Tsymbal</b> (DE)</td> </tr> <tr> <td style="border: none;"><b>Mario Koeppen</b> (JP)</td> <td style="border: none;"><b>Wilson Wang</b> (USA)</td> </tr> <tr> <td style="border: none;"><b>Lukasz Kurgan</b> (USA)</td> <td></td> </tr> <tr> <td style="border: none;"><b>Stéphane Lecoeuche</b> (FR)</td> <td></td> </tr> <tr> <td style="border: none;"><b>Ahmad Lotfi</b> (UK)</td> <td></td> </tr> <tr> <td style="border: none;"><b>Edwin Lughofer</b> (AT)</td> <td></td> </tr> </table>	<b>Plamen Angelov</b> (UK)	<b>Trevor Martin</b> (UK)	<b>Emili Balaguer-Ballester</b> (UK)	<b>Jose Antonio Iglesias Martinez</b> (ES)	<b>Albert Bifet</b> (NZ)	<b>Christophe Marsala</b> (FR)	<b>Nizar Bouguila</b> (CA)	<b>Hammadi Nait-Charif</b> (UK)	<b>Ahmed Bouridane</b> (UK)	<b>Frank Neumann</b> (UK)	<b>Martin Butz</b> (DE)	<b>Seiichi Ozawa</b> (JP)	<b>Heloisia Camargo</b> (BR)	<b>Marcin Paprzycki</b> (PL)	<b>André de Carvalho</b> (BR)	<b>Mykola Pechenizkiy</b> (NL)	<b>Emilio Corchado</b> (ES)	<b>Jose de Jesus Rubio</b> (MX)	<b>Damien Fay</b> (UK)	<b>Ali Salah</b> (TR)	<b>Joao Gama</b> (PT)	<b>Daniel Sanchez</b> (ES)	<b>Haibo He</b> (USA)	<b>Moamar Sayed-Mouchweh</b> (FR)	<b>Eyke Huellermeier</b> (DE)	<b>Igor Škrjanc</b> (SI)	<b>Ata Kaban</b> (UK)	<b>Vaclav Snasel</b> (CZ)	<b>Frank Klawonn</b> (DE)	<b>Alexey Tsymbal</b> (DE)	<b>Mario Koeppen</b> (JP)	<b>Wilson Wang</b> (USA)	<b>Lukasz Kurgan</b> (USA)		<b>Stéphane Lecoeuche</b> (FR)		<b>Ahmad Lotfi</b> (UK)		<b>Edwin Lughofer</b> (AT)	
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<b>Important Dates (extended deadlines!)</b>  Special sessions proposal: <b>April 13, 2014</b> Full paper submission: <b>June 22, 2014</b> Acceptance notification: <b>July 06, 2014</b> Final camera ready: <b>July 16, 2014</b>																																								
<b>Contact</b>  <b>Mail:</b> <a href="mailto:icais@bournemouth.ac.uk">icais@bournemouth.ac.uk</a> <b>Web:</b> <a href="http://computing.bournemouth.ac.uk/ICAIS">http://computing.bournemouth.ac.uk/ICAIS</a>																																								

<b>Sponsoring Organizations</b>  	<b>Proceedings</b>  	<b>Special Issues &amp; Book</b>  Evolving Systems ( <b>Springer</b> ) Neurocomputing ( <b>Elsevier</b> ) Studies in Computational Intelligence ( <b>Book Springer</b> )
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