

## Computational Intelligence UKRI Chapter

Report October 2010, D. Coyle

### Committee

Chair: Dr Damien Coyle, University of Ulster

Vice-chair: Dr Ke Chen, University of Manchester

Past-chair: Prof Leslie Smith, University of Stirling

Secretary: TBD

Treasurer: Dr Damien Coyle

England Representative: Dr. Simon Coupland, DeMonfort University

Northern Ireland Representative: Dr. Ammar Belatreche, University of Ulster

Rep. of Ireland Representative: Dr. Sean McCloone (acting), NUI Maynooth

Scotland Representative: Prof. Leslie Smith (acting), University of Stirling

Wales Representative: TBD

Industrial Liaison: Dr. David Elizondo, De Monfort University.

GOLD Representative: Mr Snaider Carrillo, University of Ulster

Women in CI Research Representative: Dr. Keeley Crocket, Manchester Metropolitan University

Webmaster: Dr. Damien Coyle, University of Ulster

**Website :** <http://ewh.ieee.org/r8/ukri/cis/>

### Activities

The chapter has added a few Members to the committee, published a newsletter (attached) which includes

- Interview with the Director of the Centre for Computational Intelligence, De Monfort University
- Call for UKRI Chapter Committee involvement
- CI Related Events in the UKRI
- Chapter Competition - Win a prize

We have also included a report in society's IEEE Computational Intelligence Magazine (attached) .

The chapter has been active in co-sponsoring a number of events and holding meetings in the past few months.

### Chapter meetings/events in 2010.

1. **Seminar on** "Intelligent Human-Centred Vision System", Intelligent Systems Research Centre, University of Ulster, 1pm, 28th July 2010 by Dr. Chee Seng Chan, Centre of Multimodal Signal Processing (CMS), MIMOS Berhad, Malaysia.
2. **Seminar on** "Computer-aided diagnosis for breast cancer in mammography", Intelligent Systems Research Centre, University of Ulster, 1pm, 7th July 2010 by Dr. Yongyi Yang, Illinois Institute of Technology, Chicago, USA.
3. **Seminar on** "Design of assistive robots based on human motion biomechanics ", Intelligent Systems Research Centre, University of Ulster, 12.30pm, 2nd July 2010 by Dr Ashish Dutta, Indian Institute of Technology, Kanpur, India.

4. **Seminar on** "Application of Reinforcement Learning to Human-Robot Interaction", Intelligent Systems Research Centre, University of Ulster, 12.30pm, 25th June 2010 by Prof. Tomohiro Shibata, Graduate School of Information Science, NAIST, Japan and Computational Neuroscience Labs., ATR, Kyoto, Japan.
5. **Seminar on** "Applications of Dynamic Decision Networks in Active Learning Simulators", Intelligent Systems Research Centre, University of Ulster, 12.30pm, 23rd June 2010 by Dr. Julieta Noguez Monroy, Tecnológico de Monterrey, Mexico.
6. **Seminar on** "Biomimetic and Biofeedback approaches in Brain Machine Interface", Intelligent Systems Research Centre, University of Ulster, 12.30pm, 16th June 2010 by Dr. Kianoush Nazarpour, Institute of Neuroscience, Newcastle University, UK.
7. **Seminar on** "Understanding the brain through active touch sensing in rats and robots", Intelligent Systems Research Centre, University of Ulster, 12.30pm, 26th May 2010 by Prof. Tony Prescott, Active Touch Laboratory, University of Sheffield, UK.
8. **Seminar on** "Brain-Computer Interface for medical applications", Intelligent Systems Research Centre, University of Ulster, 12.30pm, 12th May 2010 by Dr. Cuntai Guan, Institute for Infocomm Research, Agency for Science, Technology and Research, Singapore.
9. **Seminar on** "Where non-smooth systems appear in structural dynamics", Intelligent Systems Research Centre, University of Ulster, 12.15pm, 10th March 2010 by Prof. Keith Worden, University of Sheffield, UK.
10. **Seminar on** "Determinants of Action Potentials in Human Nervous System", Intelligent Systems Research Centre, University of Ulster, 12.15pm, 10th March 2010 by Dr. Rakesh Kumar Sinha, Leverhulme Visiting fellow, Intelligent Systems Research Centre, University of Ulster, UK.
11. **Seminar on** "Computational intelligence approaches to bio-signal processing for motor imagery-based non-invasive brain-computer interfaces", Intelligent Systems Research Centre, University of Ulster, 2.30pm 10th February, 2010 by Dr. Damien Coyle, University of Ulster, UK.
12. **Seminar on** "Computational Intelligence Approaches to Biosignal Processing for Motor Imagery-based Non-Invasive Brain-Computer Interfaces", Centre for Computational Intelligence, De Monfort University, UK, 2pm 4th February, 2010 by Dr. Damien Coyle, University of Ulster, UK.

#### **Technical Co-sponsorship (2009/2010):**

The chapter is providing (has provided) technical co-sponsorship to a number of UKRI based events. These include

[CIWinterSchool2011](#), IEEE-CIS/Surrey Winter School on Computational Intelligence - Theory and Industrial Applications, University of Surrey, Guildford, UK, 3-7 January, 2011.

[Webinar](#) by UKRI member Prof. Simon M. Lucas School of Computer Science and Electronic Engineering, University of Essex (UK), titled **Playing Games With N-Tuple Systems**, will be hosted by the IEEE Toronto Section on 29th September, 3pm-4.30pm

[ISSC2010](#), *the 21st Irish Signals and Systems Conference*, School of Engineering, University College Cork, Cork, Ireland, 23 -24 June, 2010

**[BIC-TA2010](#), *the 5th International Conference on Bio-Inspired Computing: Theories and Applications***, Liverpool Hope University, Liverpool, UK, 8-10 September, 2010.

The society is also providing technical co-sponsorship to the

**[UKCI2010](#), *the 10th Annual Workshop on Computational Intelligence***, University of Essex, September 8-10 is Technically co-sponsored by the IEEE Computational Intelligence Society

### **Competition**

A competition was organised for chapter members in which chapter members could win a society t-shirt.

### **Plans for 2010**

Plans are underway to recruit a few more volunteers to complete the committee and to continue focusing on the chapter development strategy outlined in the newsletter and CI magazine report. We intend to continue with the series of interviews with prominent CI researchers including in the newsletters. We plan to continue with our seminar series in 2010 and 2011 increase the number of meetings in local areas through the newly recruited geographical area representatives. Our intention is to aim for the society's Best Chapter award this year.