

Computational Intelligence UKRI Chapter

Report October 2012, 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

Student Representative : Mr Stephen Matthews, De Monfort University.

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/>

News

1. Major Award for the IEEE CIS UKRI Chapter received at IEEE UKRI 50th anniversary celebrations in Shannon, Co Clare, Rep. of Ireland

In the last report it was announced that the IEEE Computational Intelligence Society UKRI section chapter is this year's winner of the IEEE Region 8 Best chapter award.

Every year, IEEE Region 8 organizes the chapter of the year awards (Region 8 includes Europe, Middle East and Africa). There are two awards, one for the small chapters (<100 members) and the other for larger chapters. The IEEE CIS UKRI chapter has 297 members. The award is open to chapters in Region 8 across all IEEE society's and is for 2011 activities. During IEEE 50th anniversary celebration held at Irish Aviation Authority Centre, Shannon, Co. Clare, Ireland Dr Damien Coyle (chair) was presented with the award.

2. The chapter organised the 2nd IEEE CIS UKRI chapter GOLD Careers in Computational Intelligence Workshop in conjunction with UKCI conference being held at Herriot Watt University, Edinburgh in September 2012.

The event was successful and included

- a. A talk from the chapters Women in Computational Intelligence Representative, Keeley Crockett. Keeley is also the IEEE CI society's WCI subcommittee chair.
- b. A range of talks from local industry experts and more.

Further info to follow

- 3. A Distinguished lecture under the society's DLP program was approved by the society and some chapter funding was agreed to support the Distinguished Lecturer travel in the UKRI visit sites in England, Scotland, Northern Ireland and Rep. of Ireland.**

The DLP visit was due to take place in October 2012 but has since been postponed until further notice.

Activities

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

Chapter meetings/events in Nov 2011 – October 2012.

- 1. Seminar on: "Graph Similarity -- Counting Through Matrices"**
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 6/6/2012
By : Prof. Hui Wang, School of Computing and Mathematics, University of Ulster.
- 2. Seminar on: "Enhancing the performance of a practical BCI system"**
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 14/3/2012
By : Mr. Viabhav Gandhi, BCI & Assistive Technology team, Intelligent System Research Centre (ISRC), University of Ulster.
- 3. Seminar on: "Challenges in simple and hybrid brain computer interfaces"**
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 01/3/2012
By : Dr. Shahjahan Shahid, Intelligent System Research Centre (ISRC), University of Ulster.
- 4. Seminar on: "Large Scale Long Term Urban Navigation using Vision and Laser"**
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 20/1/2012
By : Prof. Paul Newman, Oxford University, UK.
- 5. Seminar on: "The Neuromorphic AER: Spiking from sensors to actuators"**
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 19/1/2012
By : Prof. Alejandro Linares Barranco, University of Seville, SPAIN
- 6. Seminar on: "Graphical Robotic Mapping: Theory and Application in Marine and Terrestrial Domains"**
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 6/1/2012
By : Dr. Maurice Fallon, Computer Science and Artificial Intelligence Laboratory (CSAIL), MIT, USA
- 7. Seminar on: "Visual Image Processing Using Spiking Neural Network Models"**
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 7/12/2011
By : Dr. QingXiang Wu, BISNE research team, Intelligent System Research Centre (ISRC), University of Ulster
- 8. Seminar on: "Modelling of Auditory system for sound localization with pitch information"**
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 23/11/2011

By : Dr. Takatoshi Okuno, BISNE research team, Intelligent System Research Centre (ISRC), University of Ulster

9. **Seminar on:** "Enhancement in Application of Diffusion Tensor Imaging by Independent Component Analysis"
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 16/11/2011
By : Dr. Min Jing, Computational Neuroscience Research Team(CNRT), Intelligent System Research Centre (ISRC), Intelligent System Research Centre (ISRC), University of Ulster
10. **Seminar on:** "Modelling people's movements patterns to enhance indoor tracking systems"
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 9/11/2011
By : Dr. Eoghan Furey, Ambient Intelligence Team, Intelligent System Research Centre (ISRC), Intelligent System Research Centre (ISRC), University of Ulster
11. **Seminar on:** "Addressing the Problem of Detecting Multi-Occupants in Device-Free Passive Localisation Scenarios"
Venue: Intelligent Systems Research Centre, University of Ulster, 1.00pm, 26/10/2011
By : Mr. Gabriel Deak, Intelligent System Research Centre (ISRC), Intelligent System Research Centre (ISRC), University of Ulster

Technical Co-sponsorship (2011-2012):

The chapter is providing (has provided) technical co-sponsorship to a number of UKRI based events in 2011. These include

[UKCI2012](#), **12th Annual Workshop on Computational Intelligence**, Heriot-Watt University, Edinburgh, UK, 5-7 September, 2012.

The UKRI Chapter supports this workshop which the IEEE Computational Intelligence Society is technically co-sponsoring

[IEEE CIS UKRI GOLD Careers Workshop](#) Herriot-Watt University, Edinburgh, UK, September, 2012 (FREE)

[ISSC2012](#), **23rd Irish Signals and Systems Conference**, School of Engineering, NUI, Maynooth, Dublin, Ireland 28 -29 June, 2012.

[ACIB11](#), **1st Annual Conference on Integral Biomathics**, Stirling University, Scotland, 29-31 August 2011.

[Webinar](#) by UKRI member hosted by IEEE Toronto Section Titled: ***Semantic knowledge-based framework to improve the situation awareness of autonomous underwater vehicles*** by Dr. Emilio Miguelanez Martin, Senior Development Engineer at Seebyte Ltd. UK, 14th June, 2011 4pm-5.30pm (BST)

[AICS2011](#), **The 2011 Artificial Intelligence and Cognitive Science Conference**, University of Ulster, Magee Campus, 5-7 September, 2011.

[UKCI2011](#), **12th Annual Workshop on Computational Intelligence**, University of Manchester, UK, 7-9 September, 2011.

[ACIB11](#), *1st Annual Conference on Integral Biomathics*, Stirling University, Scotland, 29-31 August 2011.

[CEEC2011](#), *3rd Computer Science and Electronic Engineering Conference*, School of Computer Science and Engineering, University of Essex, Colchester, UK 13 -15 July, 2011.

[BCI-AR2011](#), *International UKIERI Workshop on the Fusion of Brain-Computer Interfaces and Assistive Robotics*, University of Ulster, Derry, N. Ireland, 7-8 July, 2011.

[ISSC2012](#), *22nd Irish Signals and Systems Conference*, Hosted by Trinity College Dublin, Ireland 23 - 24 June, 2012

[IEEE CIS UKRI GOLD Careers Workshop](#) DeMonfort University, Leicester, UK, May, 2011 (FREE)

Plans for 2012

Recruit a few more volunteers to complete the committee and to continue focusing on the chapter development strategy. We intend to continue with the series of interviews with prominent CI researchers including in the newsletter and need to address this. We plan to continue with our seminar series in 2013 and 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 next year. We also hope to actively participate in the organisation of innovative conferences and workshops and will focus on continuing our GOLD careers event next year. We hope to reschedule the agreed and approved DLP visit for early 2013 and organise another in late 2013.