EEUG News

The newsletter for the Educational Electronic Computer Aided Design users

Volume 18 N^{o} 2 June 2005 Editor: Robert Self rpself@essex.ac.uk

News from the ECAD Educational User Group Committee

In this newsletter:

1. Introduction

Welcome to this issue of the EEUG Newsletter. The main work at the moment is in the preparation for the Autumn 2005 workshop at University of Essex in September. We hope to see everyone there. Please make the effort to attend and to register as soon as possible. The workshop programme is developing and is being updated as the organisation continues. This is also expected to be the last workshop that myself as Chair and Richard Walters as Treasurer will be involved directly in the organisation of as our term in the committee is at an end. We will however remain active within the EEUG as a whole.

2. RAL Liaison Group Meeting

At the annual RAL-EEUG Liaison meeting held on 20th April 2005, RAL updated EEUG representatives with regard to changes in the RAL portfolio. Because the portfolio is updated regularly there were in practice too many changes to cover in a single update session, so the liaison meeting focused on additions to the Cadence product line and the adoption of Celoxica software licensing into the RAL portfolio.

The meeting started with an introduction and overview by John Mclean. This was followed by presentations detailing enhancements made to the Cadence product line and an update covering the incorporation of Celoxica DK software into the RAL portfolio. Under these new arrangements existing Celoxica licenses will be transferred over for a one-off charge and then maintained year-on-year through the normal RAL software licensing procedures. It is envisage that maintenance will be charged at an annual rate of 750 euros. Additional licenses can be purchase if required. These will be maintained within the 750 euro rate charged for existing licenses.

The purchasing procedure for FPGA development and demonstration boards, however, remains unchanged - FPGA boards will continue to be supplied directly from Celoxica.

3. Workshop 2005 (1) – additional call for contributions and registration

Thanks to those who have indicated their interest in the Workshop this year, but we are still looking for oral presentations and demonstrations. We set the deadline this year to be the 30th June, but will still be able to include submissions after this date. As usual, we do look for good support from the EEUG Community. This year, a good mixture of both teaching and research activities would be of interest.

If you are intending to attend the workshop, we do need to know as soon as possible the number of attendees. The registration form is attached to the end of the newsletter and is also available on the EEUG Website. Can you either register with Richard Walters, or email him your intention to register as soon as possible.

4. Treasurer's Report

A full statement will be prepared for the AGM. The key statistics for this year are:

- £116.5 has been paid to the University of Essex for the workshop organisation
- ~£500 to be paid to University of Essex for the workshop at the end of July
- £600 to be transferred from the reserve to current account to pay for the above
- Current status:
  - ~£1000 in current account
  - ~£700 in reserve account

This year, the registration fees for the Autumn Workshop will remain the same as for last year.

5. Committee Members

The current committee members are:-

- Chair: Ian Grout (University of Limerick, Ireland) – due to have retired March 2005
- Vice-Chair: Stephen Dickinson (Lancaster University) – due to retire September 2005
- Secretary: Martin Burbidge (Lancaster University) – commenced in January 2005
- Treasurer: Richard Walters (London Metropolitan University) - due to have retired March 2005
- Information Officer: vacant position
- RAL Liaison Officer: Robert Self (University of Essex)
- Elected Member: vacant position
- Elected Member: vacant position

6. New Committee Members

Both the Committee Chair and Treasurer were due to step down from the committee in March 2005. However, we still require replacements and so the Chair and Treasurer will remain on until after the workshop in September. We need replacements for the following committee members:-

- Chair (was due to step down in March 2005)
- Co-Chair (from September 2005)
- Treasurer (was due to step down in March 2005)
- Information Officer (immediately)

If anyone is interested in joining the committee in the above posts, please contact the Chair (email: Ian.Grout@ul.ie) for further information.

7. EEUG Website

http://www.eeug.org.uk

This year, we have the opportunity to update the EEUG website. If you have any suggestions as to the layout and content of the updated website, please email any of the committee members with your suggestions by the end of August 2005.

8. Upcoming Events

- International Conference on Interactive Computer Aided Learning, ICL 2005, 28th – 30th September 2005, Villach, Austria, **http://www.icl-conference.org/**
- 5th International Conference on Advanced A/D and D/A Conversion Techniques and their Applications (ADDA 2005), University of Limerick, Limerick, Ireland, 25th – 27th July 2005, **http://conferences.iee.org/adda/**
- EEUG Autumn Workshop, 7th – 8th September 2005, University of Essex, UK, **http://www.eeug.org**
- Higher Education Academy, Engineering Subject Centre, events calendar. **http://www.engsc.ac.uk/nef/events/index.asp**
- IEE Calendar of events. **http://www.iee.org/Events/Calendar**
- IEEE International SOC Conference, 25th – 28th September 2005, Washington Dulles Airport, USA, **http://www.ieee-socc.org/**
- Embedded Systems Conference, San Jose, USA, 12th – 15th September 2005, **http://www.esconline.com/**
- 10th Annual Mechatronics Forum Biennial International Conference, MX2006, 19th – 21st June 2006, Penn State Great Valley, **http://www.gv.psu.edu/MX2006/**

9. Autumn Workshop 2005 - Call for AGM Agenda Items

If anyone has an item for the AGM agenda, please forward it to the Chair by 31st August 2005 (email: Ian.Grout@ul.ie).

10. Funding Applications

In April this year, a proposal was submitted by the committee members to the *Higher Education Academy Engineering Subject Centre* in order to obtain support and funding for the EEUG activities. In particular increasing the EEUG participation with institutes not already represented. The main outputs from the project will be:-

- Information literature for disseminating the EEUG activities.
- Visitations to new institutes to increase EEUG activity awareness and promoting new members.
- Considerations for the following enhancements to the EEUG activities:-
    - Training events.
    - Additional workshops and seminars.
    - Specialist focus groups.

The project proposal was successful and the project will commence in September this year. As part of the Annual Workshop, time will be allocated to a project start-up session.

11. Contributions to the Newsletter

We would like to invite articles from the EEUG community on aspects of teaching and learning, along with suitable research activities, for publication in the newsletter. Articles to be a maximum of 1 page in length. Please forward any articles for the January 2005 newsletter by the ***end of December 2004*** to the Chair (Ian Grout).

12. Workshop 2005 (2)

Call for Contributions

"Teaching Modern Digital Systems: System on a Chip design, fabrication and test"

University of Essex, UK

7th – 8th September 2005

Digital systems design has undergone a revolution over the last decade with the introduction of hardware description languages (HDLs) and the latest generation field programmable gate arrays (FPGAs). Where once complex digital systems could only be discussed within the classroom environment, the ability to incorporate the cost-effective physical design and prototyping of complex "System in a Chip" (SoC) designs is a realistic option. The advances, if considered carefully, can be used to significantly enhance the teaching and learning of digital systems design from basic processor cores through to high-speed communications networks. The EEUG Autumn Workshop 2005 is to be held on the 7th-8th September 2005 at the University of Essex. Contributions are sought from those involved in (or have planned involvement in) teaching and research activities, in the following (but not exclusive) areas:-

- Developing courseware for SoC design, fabrication and test (SoC or System in a Package (SiP)).
- Hardware Description Languages (HDLs).
- Education activities incorporating programmable logic devices.
- Hardware/software co-design.
- Synthesis.
- Reliability and safety issues.
- Modelling and simulation.
- Computer Aided Design (CAD) and Computer Aided Test (CAT).
- Teaching and learning experiences.
- Activities in National and European based Educational research projects.

Directions to the University of Essex

Travel details to the University by road, rail or air can be found on the University travel page:-

Travel to the University of Essex
http://www.essex.ac.uk/about/find.html

Internet Resources

EEUG Web Site
http://www.eeug.org.uk
University of Essex
http://www.essex.ac.uk

Workshop Costing

Overnight rate	(incl. evening meal and room on day 1, along with breakfast, lunch and refreshments on day 2)	£90
Day rate	(incl. lunch and refreshments on day 2)	£50

Payment by cheque or company invoice. Cheques to be made payable to **EEUG**

Provisional Programme (12th July 2005)

Wednesday 7th September	Activity	Location
4.30pm - 7.00pm	Registration	Department of Electronic Systems Engineering, Main Foyer, Square 1
7.00pm – 8.15pm	Evening meal	Cafe Vert, Square 3

8.30pm – 9.30pm	Industry presentation Avril Manners, ISLI, Livingston, UK	Department of Electronic Systems Engineering, Seminar Room 1N1.4.1
Evening	Social gathering	Student Union Bar, Square 3

Day 2 - Thursday 8th September	**Activity**	**Location**
7.30am – 8.30am	Breakfast	"Food on 3", Square 3
8.45am – 9.20am	Registration	Department of Electronic Systems Engineering, Seminar Room 1N1.4.1
9.20am - 9.30am	Chairperson's welcome	Seminar Room 1N1.4.1
9.30am – 10.45am	Oral presentations K. Barratt and P. Coulton, Department of Communication Systems, Lancaster University, UK, "Experiences of a Problem Solving Approach to Teaching FPGA Programming" E. Jolly and M. Fleury, , Department of Electronic Systems Engineering University of Essex, "Design of a Real-time Hough Transform on Configurable Logic" *Paper to be confirmed*	Seminar Room 1N1.4.1
10.45am – 11.15am	Morning coffee break	Seminar Room 1N1.4.1
11.15am – 12.30pm	Oral presentations P. Coulton, Department of Communication Systems, Lancaster University, UK, *Paper title to be confirmed* K. Cheng and M. Fleury, Department of Electronic Systems Engineering, University of Essex, "Design of a Network Security Devices with Hardware Compilation and FPGA Development System -Educational Implications" T. O'Shea and I. Grout, Department of Electronic and Computer Engineering, University of Limerick, Ireland, "Prototyping and Evaluating DSP Functions in MATLAB(R) /SIMULINK(R): A Sigma-Delta Analogue Signal Generation Evaluation System	Seminar Room 1N1.4.1
12.30pm – 1.30pm	Buffet Lunch and demonstrations/roadshow RAL Roadshow Demonstration - University of Essex, *Presentation title to be confirmed* Demonstration - University of Limerick, "*Sigma-Delta Signal Generator Prototyping System*"	Seminar Room 1N1.4.1
1.30pm – 1.55pm	EEUG AGM	Seminar Room 1N1.4.1
1.55pm – 2.10pm	Simon Steiner, Higher Education Academy Engineering Subject Centre update	Seminar Room 1N1.4.1
2.10pm – 2.35pm	RAL Microelectronics Support Centre update	Seminar Room 1N1.4.1
2.35pm - 3.00pm	Tea and close	Seminar Room 1N1.4.1

EEUG Workshop 7-8th September 2005
Essex University - Registration Form

Please complete all sections below and return to:

Dr. Richard Walters, EEUG Treasurer,
CCTM, London Metropolitan University- North Campus, 166-220 Holloway Road, London, N7 8DB, UK

Email: **r.walters@londonmet.ac.uk**

Surname:_____ Style: (Dr/Mr/Miss etc)_____

Forename:_____ Sex: Male / Female

Organisation:_____

Address:_____

_____

County:_____ Country:_____

Postcode:_____ Email:_____

Attendance Details: (Please tick as appropriate)

I will be attending on both 7th and 8th September and will require overnight accommodation (Total cost £90.00 : includes evening meal, accommodation, breakfast, lunch and refreshments).	
I will be attending only on 8th September (Total cost £50.00: includes lunch and refreshments).	

Payment Details:

Enclosed Cheque		Company Purchase Order	
Order/ Cheque Number:_____			

Please indicate any special dietary or other requirements in the space below, e.g. Vegetarian meals, wheelchair access, etc.

Cancellation Policy:
The EEUG reserves the right to charge an administration fee of 25% for cancellation after 31st August, and 100% for un-notified non-attendance.

Further details concerning the workshop can be found at the EEUG website (http://www.eeug.org.uk)