Newsletter June 2005

Convenors Report

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ACoRN Network Convenor

Welcome to the second issue of the ACoRN Newsletter. ACoRN is now gaining momentum with events in both June and July. The administrative side of ACoRN is almost up running at full capacity, and we have now a signed agreement with the EU Network of Excellence in Wireless Communications (NEWCOM) for establishing close collaboration.

The next event coming up in July is the ACoRN-NICTA Wireless Winter School.

An ACoRN school event is scheduled for September, which will feature three internationally renowned researchers giving short-courses in hot-topic areas. The invited lecturers are:

- Prof. David Tse, University of California, Berkeley;

- Prof. Emanuele Viterbo, Politecnico di Torino;

- Dr. Gerhard Kramer, Bell Labs Innovations;

You can find more information about this event on the ACoRN website.

Coming Events

4-9 July Sydney	*Australian Conference on Optical Fibre Technology (ACOFT)*
11-15 July Canberra	*ACoRN-NICTA Winter school*
4-9 Sept Adelaide	*IEEE International Symposium on Information Theory (ISIT)*
12-16 Sept Adelaide	*ACoRN Spring School 2005 Coding Information Theory*
12-16 Sept Paris	*NEWCOM Summer School, Estimation theory for wireless communications - new trends*

For a complete list of events, see the
event calendar

NEWCOM Collaboration

I am very happy to announce that we now have a signed ACoRN-NEWCOM joint agreement, setting up the scene for collaboration across the two networks.

The prospects and benefits of close collaboration with NEWCOM warrant for a very exciting time for ACoRN and ACoRN members.

The declared strategic objective of NEWCOM is the development of mobile and wireless systems beyond 3G. Through ACoRN, Australia is now in a position to take part in these European activities, providing an exciting path forward for Australian telecommunications research.

Following are further details of the ACoRN-NEWCOM Joint Agreement and NEWCOM.

ACoRN-NEWCOM Joint Agreement

The joint ACoRN-NEWCOM agreement was signed in late May. The intention of the agreement is to establish close collaboration between ACoRN and NEWCOM through the existing programs of activity in the two networks. Joint activities currently being pursued are:

- Annual joint workshop;
- ACoRN and NEWCOM events open for members of both networks;
- Jointly funded researcher/student exchanges;
- Exchange of postgraduate coursework material;
- Jointly edited special journal issues, e.g. IEEE, Journal on Selected Areas of Communication

A standing committee of four people (two from ACoRN and two from NEWCOM) will coordinate the joint activities. The ACoRN members in the committee are A/Prof. Jamie Evans (Uni. Melbourne) and Prof. Lars Rasmussen (UniSA). The NEWCOM members are to be appointed in July.

The joint ACoRN-NEWCOM collaboration agreement is a major achievement for ACoRN and will be a priority for establishing a strong Australian involvement in Europe.

Activities Open for ACoRN and NEWCOM Members

The first two events open for both ACoRN and NEWCOM members are:

- ACoRN Spring School 2005: Coding and Information Theory (Adelaide), Sept. 12-16, 2005
- NEWCOM Summer School: Estimation Theory for Wireless Communications – New Trends (Paris, France), Sept. 12-16, 2005

Unfortunately, the dates of the events clash. Once the coordinating committee is in place, such clashes will be avoided in future. The intention is that all ACoRN and NEWCOM events will be open to both network members.

Annual Joint Workshop

The main event for promoting and establishing collaboration is a joint annual workshop, alternately hosted by Australia and Europe. The intention is for the workshop to be a two-day event held in connection with a larger, general conference event. The inaugural workshop will take place in May next year. The location is yet to be decided, but will most likely be in connection with the IEEE Vehicular Technology Conference in Melbourne or the IEEE International Conference on Communication in Istanbul, Turkey, however, not necessarily in the same state/country. A decision will be made at the first meeting of the ACoRN-NEWCOM committee.

Researchers and Students Exchanges

An important part of the collaboration is a joint exchange of researchers and students. The first ACoRN-NEWCOM exchanges are currently being scheduled for later this year, aiming for three NEWCOM members visiting ACoRN institutions.

What is NEWCOM?

The EU Network of Excellence in Wireless Communications (NEWCOM) is a European research network with a similar mission and objectives as ACoRN.

NEWCOM aims at creating a European network that links in a cooperative way a large number of leading research groups addressing the strategic objective "Mobile and wireless systems beyond 3G". This objective is a strategic research priority within the EU.

The joint programme of activities involves:

- Researcher and student exchanges;
- Organisation of workshops and conferences;
- Preparation of graduate courses coordinated with the PhD programs of the academic partners;
- Broad dissemination of scientific results;
- Promotion of entrepreneurship among its researchers, encouraging exploitation of IPR through the creation of start-up companies.

NEWCOM includes participants from almost all countries of the European Union (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, the Netherlands, Spain, Portugal, Sweden, and United Kingdom). An additional six countries outside the EU (Hungary, Israel, Norway, Poland, Switzerland and Turkey) are also associated with NEWCOM.

In terms of members, NEWCOM is significantly larger than ACoRN, including 61 academic and industry partner organisations, totalling hundreds of researchers and students. A large number of world-class European researchers and research groups are members of NEWCOM.

For a comprehensive description of NEWCOM, please visit the NEWCOM website at http://newcom.ismb.it.

This event is expected to be a forum for establishing collaborative research, opening up for Australian involvement in the NEWCOM work towards future standards for mobile wireless communications.

IT Student Committee

At the last IEEE Information Theory Society Board of Governors meeting Prof. Andrea Goldsmith from Stanford University, agreed to chair a newly-formed Information Theory Student Committee. The committee will be mostly student-run, with the goal of making the IEEE Information Theory Society of more value and less intimidating to students (and hopefully motivating them to become long-term members). Some activities the committee may initiate include panels of famous information theorists or mixers geared specifically towards students, student poster sessions at conferences and/or workshops, opportunities to meet the Board of Governors and have a student representative participate in Board of Governors meetings, feedback on how the society can be of more value to students, etc.

Prof. Goldsmith is currently soliciting students that would like to participate in the committee. If you are a graduate or a graduate student and think you would be interested, please contact Prof. Goldsmith. She would like to have a core group of students to help organize the first committee meeting, which will be held at the International Symposium on Information Theory in Adelaide, Australia, 4th – 9th September 2005 and will be open to all students. The committee has been discussed with students at several universities she visited this spring, and they have been very enthusiastic. There are already a few volunteers from these discussions, but definitely more are needed to get a critical mass.

In addition, Prof. Goldsmith would like to have a few Information Theory members participate as advisors for the student committee. Prof. Goldsmith can be contacted at andrea@systems.stanford.edu

Congratulations to ACoRN Member

ACoRN member Albert Guillen i Fabregas has been awarded the 2004 Nokia Best Doctoral Thesis Award in Mobile Internet and 3rd Generation Mobile Solutions from the Spanish Institute of Telecommunications Engineers

Record Enrolments

It is pleasing to see that ACoRN has been able to offer assistance to so many researchers.   We have pledged assistance to eleven researchers to attend the Wireless Winter School in Canberra, over fifty researchers attended the Cross Layer Design Problems workshop in Adelaide and approval has been given for three international visits.

Applying for ACoRN Funding Support

The procedures for applying for ACoRN funding support have now been finalised. For most of the programs, the details are available on the ACoRN website.   For those activities where application forms and procedures are not yet on the site, please contact the ACoRN administrator. We are currently working on a complete online application process, which will be launched together with the new-look ACoRN website in August. An exciting new look and new features will then be revealed.

Workshop Reports

ACoRN Workshop on Cross-Layer Design Problems for Wireless Communications

23-24 June 05, Adelaide

The first fully ACoRN organised workshop event was a great success with more than fifty researchers and students meeting up at the Institute for Telecommunications Research (UniSA) in Adelaide. Eight one-hour, tutorial-style presentations were featured within the area of cross-layer design. The presentations covered a wide range of topic areas and problems, spanning over virtually all layers in a wireless network. Topics included network coding, control protocols in wireless networks, UMTS packet data evolution, and top-down/bottom-up design approaches. The tutorial level of the presentations ensured a high

level of interaction with the audience, providing a good foundation for future cross-disciplinary collaboration.

The eight speakers represent research groups from New South Wales, Victoria and South Australia, working on cross-layer issues. The attending delegates were from all ACoRN member states with a majority from South Australia.

The event was low budget, only requiring $20 registration fee to cover morning/afternoon teas. Lunches and workshop dinner were organised for the delegates but not included in the registration. A closing wine tasting event (externally sponsored) concluded a successful workshop, where many new links and contacts were made.

The feedback from delegates regarding the workshop has been very positive. The delegates found the workshop very useful for getting up to speed with the cross-layer research activities in Australia, and for identifying opportunities for future collaboration across ACoRN organisations. The success is very encouraging and will hopefully inspire many more such workshop across Australia.

For a more detailed report from the workshop, check the ACoRN website.

Endeavour Scholarships

The Endeavour Program brings together under the one umbrella all of the Department of Education, Science and Training's (DEST) international scholarships, so that high achieving students and scholars from around the world can undertake study or research in Australia. The Endeavour Program also has opportunities for Australian scholars to undertake research overseas.

The Endeavour Research Fellowships are for postgraduate students and postdoctoral fellows from Canada, Egypt, European Union Member States (as well as Croatia, Norway and Switzerland), Latin America and Taiwan to undertake short-term research in any field of study at an Australian higher education institution. Nineteen fellowships, to the value of up to A$25,000, will be available in 2006.

Deadline 2005: 22 July 2005

More information and enquiries on the DEST website:
http://aei.dest.gov.au/AEI/MIP/ItemsOfInterest/05Interest21.htm

Newsletter Items

If you have recently graduated, received an award, read an article that you have found usefulll, let us know so that we can share it with other ACoRN members. Please forward newsletter contributions directly to ACoRN Network Administrator christine.thursby@unisa.com.au

Contact Us

If you have any queries about anything in the newsletter or any other related ACoRN information please visit the ACoRN website for full contact details at http://www.acorn.net.au/contact