

CARI 2006

8^{ème} COLLOQUE AFRICAIN POUR LA RECHERCHE EN INFORMATIQUE ET MATHÉMATIQUES APPLIQUÉES

8th AFRICAN CONFERENCE ON RESEARCH IN COMPUTER SCIENCE AND APPLIED MATHEMATICS

Bénin – COTONOU - Benin

6 - 9 novembre 2006 / November 6 - 9, 2006

RAPPORT FINAL / FINAL STATEMENT

1. General Presentation

The CARI conference held its eighth edition in Cotonou (Benin) from the 6 to 9th November 2006. The conference deals with all the topics of data processing and applied mathematics.

The conference has confirmed its dynamic role in the animation of research in data processing and applied mathematics in Africa. The program was very dense and held in two parallel sessions, except the invited conferences, which took place in plenary session. The traditional tutorials predate the conference from 3 to 6th November and proceeded in parallel on two or three days, according to the different topics. They took place at the Polytechnic School of the University of Abomey-Calavi (EPAC) and gained a great success.

- The tutorial I « The fundamentals of IP Telephony » was organised by Roch Glitho (LM Ericsson/Concordia University, Montréal, Canada). It was held over the three days.

- The tutorial II « SCILAB the open source environment for scientific computation » was organized by Maurice Goursat and Serge Steer (INRIA Rocquencourt). It was held over the three days.

- The - The tutorial III " An introduction to the data assimilation and its applications to the environment " organized by François-Xavier Dimet and Laurent Debreu (INRIA the Rhone-Alps) was held over two days, by 3 and 4th November.

- the tutorial IV " Introduction to the mathematical treatment of the digital images" was also held over two days, November 3 and 4.

These tutorials have fully satisfied their listeners. Ten to fifteen participants took part in each tutorial, and even more than 20 concerning the tutorial I.

As for the preceding conferences, the local team of the organizing committee, this time coordinated by Marc Kokou Assogba (Polytechnic School of Abomey-Calavi) had set up, in the Convention Palace where the conference was taken place, a cyber space with ten computers opened to all the participants. Moreover Télécom Benin had installed a wifi network with internet access to the hotel Croix-du-Sud where the participants were placed.

2. NUMBERS OF THE CONFERENCE

2.1. Conference Statistics

Submitted papers :	222
Accepted papers :	48
Keynotes speakers:	5
Others conferences	2

Country	Number of submitted papers	Number of accepted papers
Algeria	68	7
Benin	12	1
Burkina Faso	4	1
Cameroun	26	7
Ivory Coast	7	0
France	29	15*
Madagascar	8	1
Morocco	22	4

Niger	1	0
Nigeria	1	1
Republic of Congo	1	1
Senegal	10	2
South Africa	2	1
Tunisia	31	7
TOTAL	222	48

* including 8 with another country. cf table below

A significant number of " French " articles are signed or Co-signed by African students carrying out their thesis in a French laboratory; in addition more of the half of these articles are written in collaboration with authors of another country. More generally, among the accepted articles, 12 are the result of collaborations between two countries:

Countries	Number of accepted papers
France – Cameroun	2
France – Madagascar	2
France – Senegal	2
France – Algeria	1
France – Morocco	1
France – Tunisia	2
France – Russia	1
France – China	1
Tunisia – Morocco	1
Algeria – Saudi Arabia	1
Republic of Congo – Belgium	1

Evolution compared to the previous conferences:

	1994	1996	1998	2000	2002	2004	2006
Number of submitted papers	130	187	190	178	176	212	222
Number of accepted papers	55	60	65	56	46	56	48
% of acceptance	42	32	34	31	26	26	22

KEYNOTES SPEAKERS

Pierre AUGER : « Agrégation de variables et dynamique des populations» *IRD Bondy, France*

Philippe DESTUYNDER : « Comment extraire l'énergie des ondes locales dans les structures hétérogènes ? *CNAM Paris, France*

Andreas GRIEWANK : "Jacobian-free optimization " *Humboldt-Universität, Berlin, Germany*

Claude LOBRY : « Mathématiques, informatique et écologie microbienne » *CIMPA, Nice, France*

Roch GLITHO : « IP Telephony in Mobile ad hoc networks : challenges and emerging approaches » *Ericsson / Concordia University, Montréal, Canada*

SPECIAL CONFÉRENCES « TECHNOLOGICAL SURVEY»

Jean-Pierre BERNAT : « Intelligence économique et propriété intellectuelle » *CIRAD, Montpellier, France*

François BROWN DE COLSTOUN : « Montage de Start-up » *INRIA, France*

2.2 Participation to the Conference

Table of participation by country of consignment:

South Africa	2		Gabon	2
Algeria	7		Madagascar	4
Germany	1		Morocco	4
Benin	89		Niger	3
Burkina Faso	2		Nigeria	1
Cameroun	8		R. of Congo	1
Canada	1		Senegal	5
China	1		Sweden	1
Ivory Coast	2		Tunisia	10
France	41		Total	194

3. THE GENERAL MEETING, THE PERMANANT COMMITTEE MEETING AND THEIR DECISIONS

3.1.1 Renewal of the permananat Committee (*cf. lists are in the web site of CARI*)

Modifications among the representatives of the institutions partners:

- AUF : Jean-Pierre Asselin de Beauville and Didier Oillo
- INRIA : Eric Badouel (CARI Secretary)
- IRD : Olivier Monga
- UNU : Max Bond

The presidency of CARI'08 will be ensured by Marc Kokou Assogba.

Africains researcher representatives:

Two mandates of African researchers came to end: Nicolas Raft Razafindrakoto (Madagascar) and Yahya Slimani (Tunisia). Four African researchers deposited their candidature to replace them within the Standing Committee of the CARI.

Two new members were thus elected:

- Amel Ben Abda, de l'ENIT/LAMSIN, Tunisia
- Rivo Rakotozafy, of the university of Fianarantsoa, Madagascar

3.1.2 Specialised Networks and Summer School

For a long time, the CARI is confronted with the important number of approached topics during its conferences. With the wire of the editions, it appears increasingly desirable to define topics associated with networks sets of themes.

The Permanant Committee will reflect in the next weeks on:

- An organization in topics which would cover all the fields of the CARI,
- These topics would be associated to networks sets of themes, with independent reading committees,
- These networks sets of themes identified could organize workshops or schools between two editions of the CARI. These manifestations would receive the " CARI label " without being financed by the CARI.

3.1.3 CARI Website

Since its creation in March 2001, the Web site of the CARI (<http://www.cari-info.org>) is maintained by the department of Computer Science of the university of Annaba, under the responsibility of Mokhtar Sellami. In each edition of the CARI, the will is expressed to make evolve this site to make of it a genuine tool of communication for the scientific community

concerned with the CARI (mailing lists, forums...). Mokhtar Sellami regrets the weak investment of the " CARI members " in the production of contents for the web site. It is requested from each member of the Permanent Committee to play the role of correspondent of the CARI website at least for his country or its under-area.

3.1.4 The electronic Journal ARIMA

The Electronic Journal ARIMA is located at the URL : <http://www.inria.fr/arma/>

The editors of the journal are:

- Mohamed Jaoua, ENIT/LAMSIN, Tunis
- Derrick G. Kourie, University of Pretoria
- Bernard Philippe, INRIA Rennes
- Maurice Tchuenta, MINESUP, Yaoundé

The articles are inserted in the website of the journal, progressively after their acceptance. Three of the four editors and a good number of members of the Reading committee took part to the CARI' 06. A meeting took place to discuss the various difficulties which arise, amongst other things the follow-up and the revival of the second readings of the articles.

- Three special numbers were already published:
 - **CARI'04**
 - **TAMTAM'05**
 - **Data Mining** (Editors : Derrick Kourie and Sadok Ben Yahya). This number is common to ARIMA Journal and the South African Computer Journal.

The proposals for special numbers can be submitted directly to the editor of the journal. The Editors will propose a rehandling of the reading committee of the journal.

A special number of ARIMA will be devoted to the CARI' 06. The management of this special number uncumbent upon the President of CARI 2006. Each author of an accepted paper in the conference can submit a wide version of his paper for this special number before the end of February 2007. The invited lecturers are also solicited to produce a written version of their presentation before the end of May 2007. The selected contributions will be published on line on the web site of the journal ARIMA in September or October 2007.

3.1.5 SARIMA MEETING

About thirty participants to the CARI' 06 were implied in SARIMA Project , either as a person in charge for an African team, or as a training student, or as a supervisor of a training student. A meeting thus took place to exchange, and study the ways and means to instigate collaboration between teams of the network. (separate report)

3.1.6 Place chosen for CARI' 06

Three countries deposited candidates'files to organize the next session of the CARI 2008: The Ivory-Coast, Madagascar and Morocco. The Standing Committee selected the proposal of Morocco. CARI' 2008 will be held in Rabat under the responsibility of Mr. Abderrahmane Sbihi, Professor at the University of Kénitra.

CONCLUSION

The Cari conference claims as a privileged place of meeting between African and Western researchers. Its scientific quality improves more and more and it becomes the place of various scientific activities. Research must be pressed on cores of researchers harnessing itself jointly on a subject, on a teaching of quality in particular on the level of the 3rd cycle, on an easy access to international scientific documentation, on the possibility of publishing its results and on the possibility of visiting other laboratories abroad. All these aspects are taken into account by dynamics of the CARI.

Report of the permanent Committee of the CARI.