## 5<sup>th</sup> Internal Conference on Computer Architecture



Proceedings: Alberto José Proença (Ed.) Departamento de Informática Universidade do Minho Portugal, Janeiro 2004



## 5th Internal Conference on Computer Architecture (ICCA'04)

## Proceedings

Alberto José Proença (Ed.)

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Mestrado de Informática / Curso de Especialização em Informática

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## **Editor's Message**

Once again I have to write these lines under the usual stress: in less than 30h the opening session of ICCA'04 will take place, and 30 full bound copies of the proceedings should lie on the conference reception for the participants...

But, once again, I think the effort was worthy! People do learn when they play. And this is a play, and the amphitheatre will be the playground tomorrow. For the 5th time MSc students will have a chance to test their communication skills under an awkward topic in computing: Computer Architecture.

Some may have enough background to feel comfortable when computer engineering jargon is used in the classroom; others feel scared, since it is the first time they meet an academic that places questions on (ir)relevant matters, such as "how does the computer really work?". And to overcome this wide range of backgrounds and motivate all students to engage in creative and self-learning activities, we play with words – "Internal" is very close to "International"... - and we all try to make the ICCA an event worthy of being misled as an International event...

The ICCA approach attempts to complement the traditional set of academic lectures which gives an updated overview of the more relevant topics in CA - with the individual commitment of each student to further explore a particular interest area in CA. This year the whole concept went a step ahead: why a Conference with only Talks? Why not add some Tutorials (longer exposure to a particular topic) and Workshops (some hands-on)? Time will say if it will be repeated next year.

Come and enjoy your stay with us! The whole content of ICCA'04 is available online in http://gec.di.uminho.pt /micei/ac0304/icca04/.

My sincere congratulations and many thanks to all who contributed once more to make this event a successful one, namely all the MSc students and my colleagues who played the role of external referees and session chairmen (António Joaquim Esteves, António Manuel Pina, João Luís Sobral, João Miguel Fernandes e Luís Paulo Santos).

Braga, 21-Jan-04

Alberto José Proença

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## Talks



## **Science in Computer Architecture**



## **Evolution of General Purpose CPUs**



## **Pre-University Education in CompArch**



## **Performance Evaluation Techniques**

# Work shops

## Tutor ials