NEW TRENDS AND TECHNOLOGIES IN COMPUTER-AIDED LEARNING FOR COMPUTER-AIDED DESIGN

IFIP – The International Federation for Information Processing

IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

> *IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.*

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is less rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is in information may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

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IFIP TC10 Working Conference:
EduTech 2005, October 20-21, Perth, Australia

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Preface

The EduTech Workshop is an IFIP TC-10 Working Conference that brings together experts to create through presentations and discussions an atmosphere conductive to innovation and development. This year EduTech is a joined event at the VLSI-SoC Conference, which is also an IFIP TC-10 Conference. The conference venue Perth is the capital city of Western Australia. Perth is known as one of the most beautiful cities in the world. This difference between the conference venue and the technological research provides an harmonic atmosphere for the technology transfer within the participants.

Computation and communication technologies underpin work and development in many different areas. Among them, Computer-Aided Design of electronic systems and E-Learning technologies are two areas, which are different but share in fact many concerns. The design of CAD and E-Learning systems already touches on a number of parallels, such as system interoperability, user interfaces, standardization, XML-based formats, reusability aspects (of content or designs), intellectual property rights, etc. Furthermore, the teaching of Design Automation tools and methods is particularly amenable to a distant or blended learning setting, and implies the interconnection of typical CAD tools, such as simulators or synthesis tools, with e-learning tools.

There are many other aspects in which synergy can be found, when using E-Learning technology for teaching and learning technology. This workshop, sponsored by IFIP WG 10.5 Design and Engineering of Electronic Systems in cooperation with IFIP WG 3.6 Distance Education, will explore the interrelationship between these two subjects, where Computer-Aided Design

meets Computer-Aided Learning.

The topics, which have been chosen for this working conference, are very timely: learning environments, tools and applications for education, education technologies and trends, teaching in the hardware design area.

We all hope that this working conference in this beautiful part of the world will be a memorable event to all involved.

Achim Rettberg and Christophe Bobda

IFIP TC10 Working Conference: EduTech 2005, October 20-21, 2005, Perth, Australia

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