The South African Institute for Computer Scientists and Information Technologists

ANNUAL RESEARCH AND DEVELOPMENT SYMPOSIUM

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CAPE TOWN
Van Riebeeck hotel in Gordons Bay

Hosted by the University of Cape Town in association with the CSSA,
Potchefstroom University for CHE and
The University of Natal

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LOCAL ORGANISING CHAIR: PROF. P. LICKER, UCT - IS

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EDITED BY
D. PETKOV AND L. VENTER

SYMPOSIUM THEME:
Development of a quality academic CS/IS infrastructure in South Africa

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FOREWORD

The South African Institute for Computer Scientists and Information Technologists (SAICSIT) promotes the cooperation of academics and industry in the area of research and development in Computer Science, Information Systems and Technology and Software Engineering. The culmination of its activities throughout the year is the annual research symposium. This book is a collection of papers presented at the 1998 such event taking place on the 23rd and 24th of November in Gordons Bay, Cape Town. The Conference is hosted by the Department of Information Systems, University of Cape Town in cooperation with the Department of Computer Science, Potchefstroom University for CHE and and Department of Computer Science and Information Systems of the University of Natal, Pietermaritzburg.

There are a total of 46 papers. The speakers represent practitioners and academics from all the major Universities and Technikons in the country. The number of industry based authors has increased compared to previous years.

We would like to express our gratitude to the referees and the paper contributors for their hard work on the papers included in this volume. The Organising and Programme Committees would like to thank the keynote speaker, Prof M.C Jackson, Dean, University of Lincolnshire and Humberside, United Kingdom, President of the International Federation for Systems Research as well as the Computer Society of South Africa and The University of Cape Town for the cooperation as well as the management and staff of the Potchefstroom University for CHE and the University of Natal for their support and for making this event a success.

Giel Hattingh, Paul Licker, Lucas Venter and Don Petkov
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ACTIVITIES OF IFIP WG 11.2 (COMPUTER SECURITY EDUCATION) & IT RELATED ETHICS EDUCATION IN SOUTHERN AFRICA

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Abstract

1. Activities and purpose of WG 11.8

WG 11.8 is one of the workgroups of TC11. WG 11.8 came together on 2 September 1998 on a boat between Vienna and Budapest as part of the IFIP World Computer Congress (WCC '98) where approximately 1200 persons attended 7 conferences.

The aim of IFIP WG 11.8 is as follows:

To promote information security education and training at university level and in government and industry.

The theme for this year was: 'Current and future needs / problems and prospects'. The human side of the computer security education and IT related ethics were some of the topics discussed.

Future activities of WG 11.8 will be presented.

2. Ethics related education in Southern Africa

Ethics - what has this to do with a scientist? According to Langford (1995) it is not so easy to accept a non-science subject as professionally important. We live in technical revolutionary times, with the Internet as one of the ways of doing business, getting information, and sharing ideas. But with that - our vision of reality also change.

We get bombarded with information - but what is truth, and what is not? Computers are used for both good and bad according to Zastrocky (1998). In technological advanced countries, laws are governing the use of computers and their misuse are punished (Langford, 1995). But that alone won't solve the problems around IT and it's misuse.

We (as computer scientists and teachers) must develop our own perspectives and must get into dialogue on ethical use of IT in business and education (and Higher education specifically).

Professionals should develop an awareness of their own values. This will be influenced by their own background and experience as well as the law, but according to Langford (1995) they must be founded upon a bedrock of personal beliefs.

If one has such a personal code, it can be applied to any uncertainty in one's life.

Why should we be moral - or teach a student that? Kant (In Spinello, 1997) said we must ask the following: "What if everybody did what I did? What sort of world would it be?" If we don't abide by basic laws of morality - we will fail to live up to the minimal requirements of social living. (Fuller in Spinello, 1997).

It is in our best interest to act moral and responsible. It is essential to be aware of personal values and to apply it to situations in one's profession.

We should ask questions like:

Is it correct?
What choice should I take?
Why did I make such a decision?
Some people feel that morality and ethics in the workplace are managerial issues. According to Spinello (1997) we are all moral agents who have various moral responsibilities in different roles. We are neighbours, parents, citizens, professionals, etc. If you work for a boss, you still have those moral duties.

Sometimes the organisational and personal values are in conflict. That is why it is good to make choices grounded on your beliefs, by going through a process of ethical decisionmaking. Langford (1995) discusses such a process of how to approach a problem and finally makes a choice with which you are comfortable.

More over - with the Internet linking people and organisations acting together, whose rules will be the ones used in global space? (Yngström, 1998). Who is responsible?

Awareness of ethical and moral problems in IT related fields are necessary. A survey was done as starting-point to look at the current status of ethics education in Southern-Africa. It investigates the IT and ethics education in schools and tertiary institutions.

The survey's questions and answers will be discussed.

3. References


Seminars attended: