

Version: 2005-11-11 002

Parallel Event of the United Nations World Summit on the Information Society (WSIS), Tunis, 16-18 2005.

“The Role of Computer Science and Engineering Professions in Achieving WSIS Goals”

Sponsored by Computer Professionals for Social Responsibility (CPSR)
<http://www.cpsr.org>

Kram (Summit Venue)
Tunis, Tunisia
16 November 2005
11:00 - 13:00
Room: Le Kram

1. Confirmed Panelists

- Michael Gasser, Department of Computer Science, Indiana University
- David Hakken, School of Informatics, Indiana University
- Eden Medina, School of Informatics, Indiana University

2. Conveners

William McIver, Jr. (CPSR)
National Research Council
Institute for Information Technology
Fredericton, NB Canada
Bill.McIver@nrc-cnrc.gc.ca

Douglas Schuler (CPSR)
Evergreen State College
Olympia, Washington USA
douglas@cpsr.org

3. Panel Chair

- William McIver, Jr.

4. Description

This panel will examine the central role that the computer science and engineering professions play in shaping the information society and how they can serve in helping to

realize the goals set by the World Summit on the Information Society (WSIS).

5. Background and Motivation

There has been relatively little discussion within the WSIS process about the research, engineering, and implementation processes and professions that produce the information and communication technologies (ICT) which give rise to the policy issues under debate. The focus has been instead – and necessarily -- on addressing the direct and indirect effects of ICT production and use and to a lesser extent on how the characteristics of ICT might be leveraged to either address human needs or violate human rights. The processes and professions that produce ICT might be said to exist as “black boxes” relative to the policy debate. In an abstracted view of this, the computing and engineering professions are arguably the most responsible for the generation of the technological artifacts and complex systems that yield the transitive social, political, and economic phenomena to which the WSIS is necessarily responding, yet these professions and their approaches have been subject to only minor scrutiny and calls for accountability within the WSIS framework.

In general and in the WSIS in particular, major exceptions to this view can be cited. Factors outside of technology production, such as policy decisions giving impetus to ICT production and end user behaviours and trends, must obviously be taken into account when assessing the sources and causes of social, political, and economic phenomena. It is also the case that attention to such areas as free and open software, technical education, and community informatics in the WSIS implies at least a partial focus on how ICT are produced. Nevertheless, there is arguably a need for an even greater focus on these issues since poor design choices and their resulting impacts are more difficult to fix later in the process. Thus, the policy debate must begin within what is now the “black box.”

The evolution of thinking and practice within the computing and engineering professions has seen the gradual erosion of boundaries of concern between technology design and production and the assessment and response to the resulting potential or realized impacts. According to this thinking, iterative and participatory interactions should occur between all stakeholders throughout the life cycle of any technology. This shift in thinking is still a long way from where it needs to be, but is reflected in significant ways in the development of research and development methodologies across a number of academic and professional disciplines, as well as the evolution of a concurrent outward focus (i.e. from the computing and engineering professions) on relevant social contexts. For example, in this latter regard, members of these professions have engaged in important ways in the WSIS process. These engagements might be seen as both attempts to: (1) inform the WSIS process from expert technical perspectives and (2) be informed by the perspectives of others present in the process as a way of evolving their own practice. External perspectives here include those of policy makers, advocates in specific issue areas (e.g. human rights and ICT), and those engaged at a practical level in social and economic development. In contrast, there has been little corresponding engagement in the WSIS process in the other direction by stakeholders outside of the technical professions to understand how ICT production might be improved in ways beneficial to the policy landscape.

Has an end-user or “black box” perspective on ICT development processes been in effect in the WSIS process? How might external engagement with the computing and engineering professions and the processes they use alter the post-WSIS ICT policy landscape for the better? What can be done within the computing and engineering professions to improve the chances of realizing the WSIS goals?

Please join us for this discussion.

6. Contact

William McIver, Jr.

Bill.McIver@nrc-cnrc.gc.ca or wmciver@acm.org