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Leal Filho / Marx Gómez /
Rautenstrauch (Eds.)

ITEE'2005

Second International ICSC Symposium
on
Information Technologies in
Environmental Engineering
(ITEE'2005)

Magdeburg, Germany, September 25-27, 2005

Proceedings

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Preface

Acquisition, storage and processing of environmental information are becoming vital to preserving the quality of human life. Potentially dangerous changes are happening in the atmosphere, oceans, animal habitats and places where hazardous materials are used, or have been discarded without adequate environmental protections.

In recent decades public interest in environmental problems has increased enormously and research into these subjects has been intensifying. At the same time developments in computer and network techniques have led to the creation of sophisticated information systems with increased storage and transmission capacities. Such data can often be accessed by the public using the internet; and the public has become a very concerned participant in discussions about the environment.

In recent years, information technology has become significant to all scientific groups and fields involved in environment engineering. Knowledge based systems which enable the study of environmental changes have been developed and are being extended to manage those environments. New paradigms for designing objects to enable easy disassembly and recovery of components contribute to reuse. Developments in exploiting alternative energy sources are reducing dependence on non-renewable resources. Surveillance techniques enable tracking of persons likely to threaten the lives of persons or their environment.

How can these developments be enhanced?

Further advance is going to be possible only if scientific teams have adequate experience, methods and tools for investigation of the changes in the environment. Success requires a high level of organization related to technical as well as scientific and human aspects of information handling.

The ITEE 2005 conference will provide a forum for exchanging information among pollution engineers, knowledge engineers and scientists. Some of the objectives include discussion of projects for long term storage of data, data update, validation and consistency of data. Research topics and funding opportunities discussed at the conference will be of interest to all researchers. Another objective is to discuss by means of teams potential the implementation and modeling of large scale systems.

September 2005

Walter Leal Filho
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