POSTER / DEMONSTRATION ABSTRACTS

education and online computing application. The library contains about 1000 science and engineering functions based on JavaScript 3.0 programming language, including many computing functions of basic and special functions, matrix and vector operation, linear/nonlinear equations, interpolation, integration, et al. The library has been ranked as one of the top web based engineering and education indexes, and is widely used for online education computing since 1996. The features of SEOSL is presented and discussed. Selected examples of how to integrate SEOSL to engineering course is demonstrated. The future development of online interactive computing for science and engineering is emphasized. SEOSL provides the basis of web based online E-Science and E-Engineering (ES and EE).

The WebAwareness Experience - Enhancing a Website with People
Stefan Nilsson, University of Trollhättan Uddevalla, Sweden; Lars Svensson, University of Trollhättan Uddevalla, Sweden; Fredrik Bengtsson, University of Trollhättan Uddevalla, Sweden; Christian Johansson, University of Trollhättan Uddevalla, Sweden

Most people perceive the World Wide Web primarily as a huge information container, where nodes of information are connected through hyperlinks. To browse the web is like walking in an endless deserted library where books, journals, brochures, video-clips and scraps of papers are spread on the shelves and tables with little or no systematic structure to guide the visitor and no evidence of the presence of other co-visitors can be found. Making people visible on the web would open for other forms of user experiences, where information spaces and social spaces merge (Maglio & Barret, 1998). The walk in the deserted library could become more of a visit to a museum, an exhibition or like participating in a study circle or taking a course at the university. Here, the awareness of other people could be prosperous in the sense that they could be used as resources for a variety of purposes. This poster presents and demonstrates a prototype of an Awareness, i.e. a web application that is aimed at making users of a web resource aware of each other. The System provides support for visual and verbal awareness, at present and in the past.

Web Skills Training: Accreditation, Certificates and Certification Exams
Jane Noel, Penn State University, USA

Early practitioners on the web had to rely primarily on a hodge-podge of self-taught skills acquired through books, cruising the web for examples and asking your colleagues for help. Now with the continued demand for skilled Internet professionals there has also been a corresponding demand for training in these areas. This poster session will offer an overview of some of the current training programs available. There will be a particular focus on accreditation and the process followed to become accredited, certificate programs that adhere to current accreditation guidelines, and industry recognized certification tests. A competitive analysis of the programs will list the number of hours of training, costs and accreditations. A sampling of some of the curriculum used as well as the types of questions on the certification exams will also be provided.

USING HIPERMEDIA TECHNICS TO TEACH INFORMATICS
Manuel Rodriguez-Damian, Universidade de Vigo, Spain; Jacinto Gonzalez-Dacosta, Universidade de Vigo, Spain; Amparo Rodriguez-Damian, Universidade de Vigo, Spain

We present a methodology and a tool that can be used to teach Informatics to technical expert people in any field (mechanic, chemistry, etc.). The applied informatics professor has a lot of difficulties to transmit in a web organized and structured way the concepts that define the different terms, theories, diagrams, concepts, and the characteristics and applications of them. Activities: - The organization of the information of the different concepts using hyperlinks to show easily the relation among them. - The use of different resources: Voice, image (static and dynamic), video, in general multimedia. The different concepts of figures are developed in cartoons and those represents the logical components, added the sound. The importance of the developed method is based in that the hipermedia tools permit the use of different formats to represent the associated information in each concept. The contents have been designed using internet based technologies.

WWW-applications in Teaching of Introduction to Power Engineering
Pekka Saari, Tampere University of Technology, Finland; Pekka Laitinen, Tampere University of Technology, Finland; Tuija Mannila, Tampere University of Technology, Finland; Tomi Ristimäki, Tampere University of Technology, Finland; Tommi Keikko Leena Korpinen, Tampere University of Technology, Finland

The aim of the paper is to present the WWW-based methods developed for the course ‘Introduction to Power Engineering’, which is a basic course of Electric Power Engineering attended annually by nearly 200 students. The WWW-applications used in this course include communications, activity exercises and laboratory registration system. The Internet has replaced traditional bulletin boards, which makes the giving of information easy and fast. The activity exercises are checked automatically by the Perl–script, giving teachers more time to other important things in teaching. Furthermore, the WWW facilitates the delivery of material for the students. Students’ opinions on the use of WWW-applications were studied with an inquiry. Based on the experiences and the study, the WWW has been found useful. The feedback has been positive and thus the use of WWW-based applications will be further developed in the future.

Web Based Learning Environment: To Follow the Instructions
Nicoletta Sala, University of Italian Switzerland, Switzerland

“The net of the nets” is changing the learning processes. In fact the Internet can be used to modify the teaching methods and the process of learning using synchronous and asynchronous education. The aim of this work is to present how to use the Web and its resources in the learning in a high school. I refer an experience in a technical institute in Italy with a