



**HCC '01**  
**2001 IEEE Symposia on**  
**Human-Centric Computing**  
**Languages and Environments**  
<http://cuisung.unige.ch/HCC01/>



**Stresa,**  
**Italy**  
**September**  
**5-7, 2001**



## **HCC'01 Call For Participation**

HCC '01 replaces the IEEE Visual Languages Symposium and will take place in the beautiful town of Stresa, on the west shore of Lago Maggiore, in northern Italy. It is the only international conference focused on languages and environments used by people. Some of these people are end users, some are professional programmers, some are software engineers, and some are children. The mission of the conference series is:

Design, formalization, implementation, and evaluation of computing languages that are easier to learn, easier to use, and easier to understand by a broader group of people.

This year there will be 3 individual symposia comprising this 2001 IEEE Symposia on Human-Centric Computing Languages and Environments. The symposia will be co-located and will partially overlap in schedule, including several shared events and talks.

### **Symposium on End-User Programming:**

**Chaired by Henry Lieberman (Massachusetts Institute of Technology), Alexander Repenning (University of Colorado), and Roland Hübscher (Auburn University)**

The direct manipulation paradigm of human computer interaction introduced in the 80s does not scale well to the exponentially growing flood of information we have to deal with as members of the information society. End-User Programming allows end users to automate repetitive tasks, author simulations, design games, balance our budget, instruct shopping agents, express ideas, and communicate our thoughts.

### **Symposium on Visual Languages in Software Engineering and Multimedia:**

**Chaired by Genoveffa Tortora (University of Salerno) and Masahito Hirakawa (Hiroshima University)**

The Symposium will focus on the intersection of three major research areas which are strongly related, namely visual programming, multimedia technologies and software engineering. Several benefits can derive from the use of visual and multimedia technology for the development and maintenance of software artifacts. This forum will explore these issues and also appropriate software engineering methodologies able to support an effective development of visual and multimedia systems.

### **Symposium on Visual Languages and Formal Methods:**

**Chaired by Mark Minas (University of Erlangen-Nürnberg) and Andy Schürr (University of the Federal Armed Forces Munich)**

The number of visual languages and environments in many applied and theoretical areas of computer science as well as other fields is growing rapidly. However, techniques for specifying, designing, and implementing such languages are still immature. Formal methods are inevitable for this task and, therefore, gain increasing importance in the context of visual languages. Another issue to be explored in this forum are whether and how visual representations and visual languages can help make formal approaches more comprehensible and usable.

### **Keynote speakers and invited presentations**

Alan C. Kay (Keynote speaker)

Renowned visionary, and pivotal researcher in modern computer science, he is best known for the idea of personal computing, the concept of the intimate laptop computer, and the inventions of the now ubiquitous overlapping-window interface and modern object-oriented programming. He invented the Smalltalk programming language, the overlapping window interface, bitmap painting, and contributed to WYSIWYG editing and Desk Top Publishing.

Sharon Oviatt (Keynote speaker)

Currently a Professor and Co-Director of the Center for Human-Computer Communication (CHCC) in the Dept. of Computer Science at the Oregon Graduate Institute of Science & Technology (OGI), her research focuses on next-generation human-computer interaction, spoken language and multimodal interfaces, and mobile and highly interactive systems.

Athula Ginige (Invited speaker, Visual Languages in Software Engineering and Multimedia)

Currently a professor of Information Technology and director of the Advanced enterprise Information Management Systems Research Centre of the University of Western Sydney, Australia.

Robert Laurini (Invited speaker, Visual Languages in Software Engineering and Multimedia)

Currently a professor and head of the Laboratory for Information System Engineering (LISI) at the Claude Bernard University of Lyon, France. He is also vice-president of UDMS (Urban Data Management Society) and vice-president of SORSA (Spatially-Oriented Referencing System Association).

## Special events:

Children's Programming Odyssey

This is a half-day event consisting of presentations of at least four innovative children's programming languages, including:

- Squeak (to be presented by Alan Kay),
- Toontalk (to be presented by Ken Kahn),
- Stagecast (to be presented by either or both Dave Smith and Allan Cypher), and
- AgentSheets (to be presented by either or both Alex Repenning and Andri Ioannidou).

Statechart Modeling Contest

In order to foster a lively discussion on formal methods, everybody is invited to apply their favorite approach to specify any reasonable variant of the family of STATECHART languages with a main emphasis on syntax and static semantics, and to submit their solution as a 2 page PostScript or PDF file to minas@acm.org before May 20, 2001. In particular, running systems which are built from such a specification are solicited.

## Tutorials:

We currently have at least three half-day tutorials planned:

- *Information Visualization*, by Bob Spence, Professor of Information Engineering at Imperial College, London.
- *Programming by Example: Intelligent Interfaces for Teaching New Behavior to a Machine*, by Henry Lieberman, Media Lab, Massachusetts Institute of Technology
- *Object-Oriented Modelling of Multimedia Applications with UML*, by Gregor Engels and Stefan Sauer, CS Dep., University of Paderborn (Germany).

## General Chair

Stefano Levialdi, Pictorial Computing Laboratory, Univ. Rome

## Steering Committee

Margaret Burnett (Chair - Oregon State Univ.),  
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