

Future of Computer Science: J.UCS Special Issue Dedicated to Professor Hermann Maurer

Frank Kappe

(Hyperwave AG, Munich, Germany
fkappe@hyperwave.com)

Gerhard Pail

(Hyperwave AG, Munich, Germany
gpail@hyperwave.com)

In April 2001, Hermann Maurer celebrated his 60th birthday, which also marks "25 Years of Computer Science in Graz". On these occasions, the Graz University of Technology, supported by a number of organizations, invited to the "Future Of Computer Science Symposium (FOCSS)". A number of outstanding specialists in their fields who spent at least 6 months at some time cooperating with Hermann Maurer gave the talks in the symposium part. This issue of J.UCS consists mainly of papers which were presented at this symposium.

The history of computer science in Graz is inseparably connected with Hermann Maurer. Born in 1941 in Vienna, Austria, Hermann studied Mathematics at the Universities of Vienna (Austria) and Calgary (Canada) starting in 1959. After that, he worked as a System Analyst with the Government of Saskatchewan (Canada) in 1963, mathematician-programmer with IBM Research in Vienna 1964-1966, and obtained his Ph.D. in Mathematics from the University of Vienna in 1965.

Hermann started his university career as Assistant and Associate Professor for Computer Science at the University of Calgary 1966-1971, then continued as a Full Professor for Applied Computer Science at the University of Karlsruhe, West Germany, 1971-1977, and Visiting Professor at SMU, Dallas, and University of Brasilia (Brazil) for three months, each, and at the University of Waterloo, during the same period, before he finally came to Graz as a full professor at the University of Technology in 1978. In addition, he acted as director of the Research Institute for Applied Information Processing of the Austrian Computer Society 1983-1998; chairman of Institute for Information Processing and Computer Supported New Media since 1988, director of the Institute for Hypermedia Systems of JOANNEUM RESEARCH since 1990, director of the AWAC (Austrian Web Application Center) of the ARCS (Austrian Research Centers) 1997-2000 and since January 2001 as chief scientist of the KNOW Center (K+ Center), the first research center on Knowledge Management in Austria.

While in Graz, he also acted as Adjunct Professor at Denver University 1984-1988, Professor for Computer Science at the University of Auckland, New Zealand, in 1993 (on leave from Graz), and was appointed Honorary Adjunct Professor and since May 2001 Honorary Research Fellow at the same University.

He obtained a number of awards, among them the ADV Prize for Merits for Information Processing in Austria, the Honorary Doctorate of the Polytechnical University of St. Petersburg in 1992, the "Enter-Price" (a nice play of words with Enterprise) of the Styrian Chamber of Commerce in 1999, the Integrata-Prize (for Human Software) in 2000, became Foreign Member of the Finnish Academy of Sciences in 1996 and a member of the Academia European in February 2000. In January 2001 Hermann was awarded the "Austrian Cross of Honours for Arts and Science Class I" and the "Medal of Honour of Styria" in April 2001.

Hermann is the author of fourteen books, more than 500 contributions in various publications, Editor-in-Chief of *'Journal of Universal Computer Science'* and *'Journal of Network and Computer Applications'*; member of the Editorial Council of the Journals *'Organizacija'*, *'Journal of Digital Libraries'*, *'Journal of Educational Multimedia and Hypermedia'*, *'International Journal of Telecommunications'* and *'Journal on Educational Resources in Computing'*; Chairperson of steering committees and member of program committees of numerous international conferences; Founder of the Conference series ED-MEDIA and WebNet and of the conference I-KNOW; he is European Representative on ICCE, has been member of the ACM for over 10 years and is member of various other professional organizations.

Hermann's research interests include networked multimedia/hypermedia systems, electronic publishing and applications to university life, exhibitions and museums, Web based learning environments (eLearning, learning platforms); languages and their applications, data structures and their efficient use, telematic services, computer networks, computer assisted instruction, computer supported new media, and social implications of computers.

If you want to know more about Hermann, visit his homepage at <http://www.iicm.edu/maurer> And if you want to know more about his friends he has cooperated with have a look at the book "People and Ideas in Computer Science" (C.S.Calude, Ed.), Springer-Verlag, 1999, ISBN 981-4021-13-X.

In addition to his outstanding research career, Hermann's probably most important achievement was his influence on the direction of computer science in Graz. He acted as a project manager of a number of multimillion-dollar undertakings including a patent for optical storage device, the development of a color-graphic microcomputer (MUPID), an electronic teaching experiment COSTOC, multi-media projects such as "Images of Austria" (Expo'92 and Expo'93), various electronic publishing projects such as "AEIOU", "PC Library", "Geothek", "J.UCS" and "Brockhaus Multimedial"; initiated the development of the first second-generation Web Based Information System Hyper-G, now Hyperwave, and the eLearning Suite (eLS), a modern net-based teaching platform, and he participated in a number of EU projects (e.g. LIBERATION, HYMN, EUROPE-MMM, HYPDOC, EONT and others).

Hermann is also a great teacher of computer science. While in Graz, he successfully supervised about 25 Ph.D.'s, and over 400 M.Sc.'s. Some of his former students and colleagues presented their views on the future of computer science in their respective fields of research at the FOCSS conference in June 2001, and a few of these contributions are part of this special issue of J.UCS.

Happy Birthday, Hermann!

Frank Kappe and Gerhard Pail, Guest Editors
Graz, June 2001