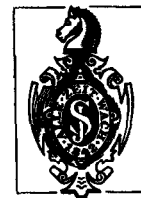


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**To Arto Salomaa
from the TCS Community**



Professor Dr. Dr. h. c. mult. Arto Salomaa

PREFACE

This volume contains some 30 papers contributed in honor of Arto Salomaa on the occasion of his 60th birthday. It is based on the symposium "Important Results and Trends in Theoretical Computer Science" organized in Graz, Austria to celebrate this occasion.

Arto is a man of many worlds and we believe that it is the harmonious coexistence of all those worlds that is the key to Arto's success in life.

The world of science. Above all Arto is a scientist. He considers himself to be a writer - he draws as much pleasure from proving a new result as from writing it up. His scientific writings have had a big influence on the development of theoretical computer science - especially in Europe. He has written more than 300 papers and 9 books (translated into 6 languages). Many of those books are by now classics and they have had a big influence on the education of several generations of computer scientists. Arto also believes in the popularization of science and has been involved in many series of lectures on science for a general audience; he has also written many articles on science for newspapers. He has been a very popular teacher at his University of Turku, Finland, and also at the University of Western Ontario, Canada, the University of Aarhus, Denmark, and the University of Waterloo, Canada where he held visiting positions for longer periods of time. He travels a lot and had shorter visits to about 150 universities in Europe, North America and Asia. He has supervised 19 Ph.D. students - many of whom are today well-known scientists. He has also influenced the development of theoretical computer science by cooperating with many scientists - he has had 35 coauthors of papers and books. He has been an inspiring teacher and coauthor for many researchers in theoretical computer science.

Many of Arto's papers are major contributions to theoretical computer science in the sense that they either solve an important problem or they introduce a new and interesting research area. His published research covers quite a broad spectrum of mathematics and theoretical computer science. His first paper, on many-valued systems of logics, was published in 1959. Since then he has published in mathematical logic, automata theory, formal language theory, computability and cryptography (the interest in cryptography goes back to his childhood when he was already reading about classical cryptography and was the code breaker specialist of the famous Skeleton Gang in his native Turku in Finland).

His value for the scientific community extends far beyond the above. He has been on the program committee of most of the important conferences in theoretical computer science, he organized many conferences, he is an editor of many scientific journals and book series, he has been the president of the European Association for Theoretical Computer Science for the period 1979-1985, and he is currently the chairman of the Award Committee for the Gödel Prize. Arto has received a number of prestigious prizes in his native Finland. He has been honored for his contributions by receiving five honorary doctorates from universities in Finland and abroad. Although nobody keeps the record of such matters it must be among the highest number of honorary doctorates held by any computer scientist.

The world of family. His favorite place is his farm, Rauhala, in the remote country side in Finland, where he often stays with his wife Kaarina. The most

happy days are the days when the whole family - his wife, son, daughter, son in law, and three grandchildren - are in Rauhala. When he is together with his grandchildren then every evening he has an hour for reading stories - the grandchildren anxiously await this event the whole day. He also reads stories to audiotapes for the times when his grandchildren are not with him.

The world of music. Arto loves classical music. He has an enormous collection of records, tapes and CD's with classical music. When he works on science either in his apartment in Turku or in his farm then the music (Beethoven, Bach,...) is very loudly on. In this way all "context" disappears and only the science and the music remains. He also talks of his own scientific writings in terms of symphonies and sonatas.

The world of sauna. The Finnish sauna is perhaps the most important regular event in Arto's life. He loves in particular the very old sauna on his farm - it is called Salosauna. While he stays on the farm an important part of the morning and the early afternoon is spent on the preparations for the sauna - then in the evening a sauna session follows. He believes that during the sauna "important" veins in the brain open and the mental ability increases significantly. There have been many instances when important open problems have been cracked either by Arto or by his friends during or after a Salosauna session. He regrets very much that he has not been born in sauna (it has not been unusual in former times that a child delivery in Finland took place in sauna). He is a real expert on sauna. Arto has written sauna-articles that have appeared in the EATCS Bulletin and has been trying to write a book on the subject several times. However he has postponed the project each time claiming that this is such an important topic and he is not ready for it yet.

The world of friends. Arto has a number of very close friends whom he calls brothers. They are a part of his family. To those friends and to his family he is Tarzan; members of his family and his brothers have then names such as Jane, Cheetah, Muviro, Korak, Bolgani. His writing talent extends far beyond scientific writings. It is always a pleasure for his friends to receive letters from Tarzan - they are full of stories and reflections about life.

In the above we have mentioned only the main aspects of Arto's life. We have not mentioned his hobbies such as the supikoira (the raccoon dog living in Finland), his expertise in the Turku language (the local dialect), and his admiration for the Toronto Blue Jays (he often wears a Toronto Blue Jays baseball shirt even to important official meetings).

We feel very privileged that we have been given the opportunity to organize this symposium and to edit this book in honor of our extraordinary friend.

We wish him a lot of success and a nice life in each of his worlds in the years to come.

June, 1994

Grzegorz, Hermann and Juhani

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