

Preface

The 30th Anniversary Conference on Current Trends in Theory and Practice of Computer Science, **SOFSEM 2004**, took place during January 24–30, 2004, in the Hotel VZ Měřín, located about 60 km south of Prague on the right shore of Slapská přehrada (“Slapy Dam”) in the Czech Republic.

Having transformed itself over the years from a local event to a fully international conference, the contemporary SOFSEM tries to keep the best of its winter school aspects (the high number of invited talks) together with multidisciplinary trends in computer science – this year illustrated by the selection of the following 4 tracks:

- Computer Science Theory (Track Chair: Peter Van Emde Boas)
- Database Technologies (Track Chair: Jaroslav Pokorný)
- Cognitive Technologies (Track Chair: Peter Sinčák)
- Web Technologies (Track Chair: Július Štuller)

Its aim was, as always, to promote cooperation among professionals from academia and industry working in various areas of computer science.

The 17 SOFSEM 2004 Program Committee members coming from 9 countries evaluated a record 136 submissions. After a careful review process (counting usually at least 3 reviews per paper), followed by detailed discussions at the PC meeting held on October 2–3, 2003 in Prague, Czech Republic, 59 papers were selected for presentation at the SOFSEM 2004:

- 22 contributed talks papers selected by the SOFSEM 2004 PC for publication in the Springer-Verlag LNCS proceedings volume (acceptance rate 19%), including the best paper from the Student Research Forum,
- 29 contributed talks papers that will appear in the MatFyzPress Proceedings (acceptance rate 26%),
- 9 student research forum papers (acceptance rate 38%), 8 of which will appear in the MatFyzPress proceedings.

The Springer-Verlag proceedings were completed by the 10 invited talks papers.

SOFSEM 2004 was the result of considerable effort by a number of people. It is our pleasure to express our thanks to:

- the SOFSEM Steering Committee for its general guidance,
- the SOFSEM 2004 Program Committee and additional referees who devoted an extraordinary effort to reviewing a huge number of assigned papers (on average about 24 papers per PC member),
- the Springer-Verlag LNCS Executive Editor Mr. Alfred Hofmann for his continuing trust in SOFSEM,
- Springer-Verlag for publishing the proceedings, and
- the SOFSEM 2004 Organizing Committee for a smooth preparation of the conference.

Special thanks go to:

- Hana Bílková from the Institute of Computer Science (ICS), Prague, who did an excellent job in the completion of the proceedings,
- Michal Bušta and Martin Stareček from ICS for realizing the SOFSEM 2004 web pages and a submission and review system that worked perfectly thus allowing a smooth PC session in Prague.

Finally we highly appreciate the financial support of our sponsors (ERCIM, Microsoft, Deloitte & Touche, SOFTEC Bratislava, Centrum.cz) which assisted with the invited speakers and helped the organizers to offer lower student fees.

November 11, 2003

Peter Van Emde Boas
Jaroslav Pokorný
Mária Bieliková
Július Štuller

⚡ Advisory Board

Dines Bjørner	Technical University of Denmark, Lyngby, DK
Peter Van Emde Boas	University of Amsterdam, NL
Manfred Broy	Technical University Munich, DE
Michal Chytil	ANIMA Prague, CZ
Georg Gottlob	Vienna University of Technology, AT
Keith G. Jeffery	CLRC RAL, Chilton, Didcot, Oxon, UK
Maria Zemánková	NSF, Washington, DC, USA

⚡ Steering Committee

Branislav Rovan, <i>Chair</i>	Comenius University, Bratislava, SK
Miroslav Bartošek	Masaryk University, Brno, CZ
Mária Bielíková	Slovak University of Technology in Bratislava, SK
Keith G. Jeffery	CLRC RAL, Chilton, Didcot, Oxon, UK
Antonín Kučera	Masaryk University, Brno, CZ
Július Štuller	Institute of Computer Science, Prague, CZ
Gerard Tel	Utrecht University, NL
Petr Tůma	Charles University in Prague, CZ
Jan Staudek, <i>Observer</i>	Masaryk University, Brno, CZ
Jiří Wiedermann, <i>Observer</i>	Institute of Computer Science, Prague, CZ

⚡ Program Committee

Peter Van Emde Boas, <i>Chair</i>	University of Amsterdam, NL
Jaroslav Pokorný, <i>Co-chair</i>	Charles University, Prague, CZ
Peter Sinčák, <i>Co-chair</i>	Technical University, Košice, SK
Július Štuller, <i>Co-chair</i>	Institute of Computer Science, Prague, CZ
Witold Abramowicz	Poznan University of Economics, PL
Martin Beran	Charles University, Prague, CZ
Mária Bielíková	Slovak University of Technology, Bratislava, SK
Shuji Hashimoto	Waseda University/Humanoid Institute, JP
Juraj Hromkovič	RWTH University, Aachen, D
Leonid Kalinichenko	Institute for Problems of Informatics, RU
Vladimír Kvasnička	Slovak University of Technology, Bratislava, SK
Roman Neruda	Institute of Computer Science, Prague, CZ
Dimitris Plexousakis	University of Crete, GR
Michael Schröder	City University, London, UK
Václav Snášel	VŠB-TU Ostrava, CZ
Gerard Tel	Utrecht University, NL
Bernhard Thalheim	Brandenburg Technical University, Cottbus, D

•■ Additional Referees

Eduardo Alonso
 Vangelis Angelakis
 Grigoris Antoniou
 Yannis Askoxylakis
 Krzysztof Banaskiewicz
 Andrzej Bassara
 David Bednárek
 Hans-Joachim Boeckenhauer
 Hans L. Bodlaender
 Dirk Bongartz
 Peter A.N. Bosman
 Harry M. Buhrman
 Lubomír Bulej
 Bernadette Charron-Bost
 David Coufal
 Panos Dafas
 Martin Doerr
 Gunar Fiedler
 Miroslav Galbavý
 Christos Georgis
 Jurgen Giesl
 Jacek Gomoluch
 Jurriaan Hage
 Pavel Hloušek
 Martin Holeňa
 Tomasz Kaczmarek
 Ivan Kapustik
 Stamatis Karvounarakis
 George Kokkinidis
 Manolis Koubarakis
 Marek Kowalkiewicz
 Stano Krajčí
 Jaroslav Král
 Ivan Kramosil
 Kiriakos Kritikos

Joachim Kupke
 Rasto Lencses
 Peter Lennartz
 Maarten Marx
 Vladimír Mencl
 Daniel Moody
 Tshiamo Motshegwa
 Manfred Nagl
 Athanasios Nikolaos
 Petr Pajas
 Demos Panagopoulos
 Nikos Papadopoulos
 Štefan Porubský
 Jiří Pospíchal
 Anthony Savidis
 Ralf Schweimeier
 Sebastian Seibert
 George Serfiotis
 Manolis Spanakis
 Branislav Steinmuller
 Yannis Stylianou
 Ioannis Tollis
 Vojtěch Toman
 Nikolaos M. Tsatsakis
 Petr Tůma
 Walter Unger
 Marinus Veldhorst
 Peter Verbaan
 Krzysztof Wecel
 Marek Wisniewski
 Jakub Yaghob
 Pawel Zebrowski
 Stanislav Žák
 Michal Žemlička

•= Organization

The 30th Anniversary SOFSEM 2004 was organized by

Institute of Computer Science, Academy of Sciences of the Czech Republic,
Prague
Charles University, Faculty of Mathematics and Physics, Prague
Faculty of Informatics, Masaryk University, Brno
Institute of Computer Science, Masaryk University, Brno
Czech Society for Computer Science

in co-operation with the Slovak Society for Computer Science

•= Organizing Committee

Július Štuller, <i>Chair</i>	Institute of Computer Science, Prague, CZ
Hana Bílková	Institute of Computer Science, Prague, CZ
Martina Brodská	Action M Agency, Prague, CZ
Michal Bušta	Institute of Computer Science, Prague, CZ
Zuzana Hájková	Action M Agency, Prague, CZ
Martin Stareček	Institute of Computer Science, Prague, CZ
Milena Zeithamlová	Action M Agency, Prague, CZ

•= Sponsoring Institutions

ERCIM
Microsoft
Deloitte & Touche
SOFTEC Bratislava
Centrum.cz

SOFSEM 2004: Theory and Practice of Computer
Science

30th Conference on Current Trends in Theory and
Practice of Computer Science, Merin, Czech Republic,
January 24-30, 2004

Van Emde Boas, P.; Pokorný, J.; Bieliková, M.; Stuller, J.
(Eds.)

2004, XIII, 385 p., Softcover

ISBN: 978-3-540-20779-5